UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

IN RE AUTOHOP LITIGATION
This Document Relates To:
DISH Network L.L.C., 12 Civ. 4155
(LTS)(KNF)

MASTER FILE

12 Civ. 4155 (LTS) (KNF)

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DECLARATION OF RICHARD RAPP

December 21, 2012

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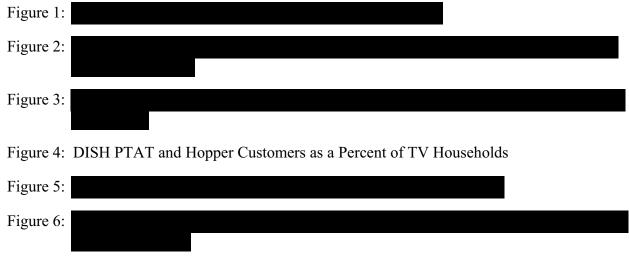


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Exhibit 26: FACTSET: callstreet, CBS Corp., Q3 2012 Earning Call, Corrected Transcript, November 7, 2012

I, Richard T. Rapp, declare:

1. I am an economist at NERA Economic Consulting. Except as otherwise stated herein, I have personal knowledge of the facts stated in this declaration and can testify on them competently if called upon to do so.

I. INTRODUCTION

A. Qualifications

- 2. I am an economist and Special Consultant to NERA Economic Consulting (NERA), an international economic consulting firm. NERA was founded in 1961 and provides research and analysis in the field of applied microeconomics, including the economics of competition, regulation, intellectual property, and finance. I joined NERA in 1977, served as its President from 1988 through 2005, and was its Chairman in 2006 and 2007. My current title is "Special Consultant." My resume is attached as Exhibit 1.
- 3. I previously submitted a declaration to the district court in California setting forth my opinion that Fox and related companies were not and would not be irreparably harmed by DISH's PTAT and AutoHop features.¹ Fox's claims of irreparable harm are similar to ABC's claims. I have updated this declaration to include current market information and facts and data specific to ABC. Certain passages and sections of this declaration are identical to those in my Fox declaration.

Declaration of Richard Rapp in Support of Defendants' Opposition to Plaintiffs' Motion for Preliminary Injunction, Fox Broadcasting Company, Inc., Twentieth Century Fox Film Corp., and Fox Television Holdings, Inc. v. DISH Network L.L.C. and DISH Network Corp., Case No. CV12-04529 DMG (SHx), August 31, 2012.

- 4. For many years, my consulting and writing have been devoted to intellectual property and antitrust economics. The many subjects I have studied and written about include competition, intellectual property, technological change, and the relationships between them, including the impact of changes in technology on markets, consumers, and producers. I have presented testimony about the consequences—including consequences for the public interest—of excluding new technology from markets in the context of evaluating the effect of injunctions and exclusion orders. I have also written and testified about the economics of innovation and research and development (R&D).
- 5. I received my B.A. in Economics from Brooklyn College in 1965 and my M.A. and Ph.D. in Economic History from the University of Pennsylvania in 1966 and 1970, respectively. Between 1970 and 1977, I was Assistant Professor, and later Associate Professor, at the State University of New York at Stony Brook, where I taught courses in microeconomics, macroeconomics, quantitative methods, economic history, and other subjects.
- 6. I have consulting experience in advertising media, including newspapers and television. I have provided economic consulting services and testimony in many intellectual property and antitrust cases and have testified about these subjects four times in the past four years.
- 7. A great deal of my experience as a consultant and expert witness has to do with the evaluation and quantification of harm, injury, or damages in commercial and industrial markets. In addition to the Fox case, I have testified about irreparable harm in an injunction hearing; harm to the public interest in an International Trade Commission hearing; and damages associated with antitrust injury, patent and trade dress infringement, breaches of contract and implied warranty and other causes of action. Although the legal standards may vary with each

setting, the economic analysis is conceptually the same, involving a comparison of the actual and expected (or forecast) reduction in the revenues, costs, and profits (and, implicitly or explicitly, the value) deriving from the affected asset or enterprise with the revenues, costs and profits that would have been earned in the absence of the allegedly harmful practices.

8. In April 2002, I participated in the joint Department of Justice Antitrust Division-Federal Trade Commission hearings on Competition and Intellectual Property Law and Policy in the Knowledge-Based Economy. I was a Co-Chair of a symposium on Antitrust and Innovation co-sponsored by the Antitrust Section of the American Bar Association and Stanford University held in May 2010. I am the author of the "Economics of Market Power" chapter of the revised *Handbook on Market Power* to be published by the Antitrust Section of the ABA. The economics of innovation has been a focus of my recent research. My published papers include titles such as "Antitrust and Innovation," "The Misapplication of the Innovation Market Concept to Mergers," and "Antitrust Treatment of Mergers involving Future Goods."

B. Assignment

9. I have been asked by attorneys for plaintiffs DISH Network L.L.C. and DISH Network Corp. (hereafter "DISH") and counterclaim defendant EchoStar Technologies, L.L.C. to evaluate the claims of: 1) the economic effects on the market for and value of ABC's copyright programming, and 2) "irreparable" harm made by defendants and counterclaimants ABC, Inc., American Broadcasting Companies, Inc., and Disney Enterprises, Inc. (hereafter "ABC") in relation to DISH's introduction of its digital video recorder (DVR) entertainment system "the Hopper" and its PrimeTime Anytime (PTAT) and AutoHop features.² PTAT

² DISH Network L.L.C. (plaintiff) v. ABC, Inc., American Broadcasting Companies, Inc., Disney Enterprises, Inc., CBS Corporation, and NBC Universal Media, L.L.C. (defendants); and ABC, Inc., American Broadcasting

allows customers to record all of the primetime programming from ABC, CBS, Fox and NBC.³
AutoHop allows customers to skip the commercials of programs recorded in PTAT when the programs are viewed the day after the original airing or later.⁴

C. Remuneration

10. NERA is compensating me for my time spent in the preparation of this declaration.

NERA bills for my time at a rate of \$700 per hour.

D. Materials Relied Upon

11. A list of the materials I have relied upon in the course of preparing this affidavit appears as Exhibit 2. Of these materials, I have assembled a limited set that may be particularly helpful to the Court in evaluating the basis of my opinions in Exhibit 3. In the event additional information comes to light, I will revise my opinions as necessary.

E. ABC's Claims

12. ABC claims that, in the absence of a preliminary injunction, it will be irreparably harmed due to the effects of PTAT and AutoHop on its advertising revenue, its ability to control each distribution "window" exclusively for its programming, the viewing of promotional advertising for its own programs, and its goodwill, and that the public interest will be served by issuing an injunction.

Companies, Inc., and Disney Enterprises, Inc. (counterclaimants) v. DISH Network Corporation and DISH Network, L.L.C. (counterclaim defendants), Case No. 12-CV-4155-LTS (KNF), August 14, 2012.

³ "DISH Introduces Hopper and Joey—Next Generation Whole-Home HD DVR Entertainment System," January 9, 2012.

⁴ "DISH Introduces Commercial-Free TV With 'Auto Hop," May 10, 2012.

13. In connection with arguing that it is likely to succeed on the merits of its copyright claims, ABC also claims a threat to existing and potential markets for its programs over the longer term.

F. Summary of Conclusions

14. ABC's claims of irreparable harm must be evaluated in two contexts: would irreparable harm to ABC ensue between the present and the time of a likely trial in either late December 2013 or early 2014? And, would the effect of DISH's technology, if permitted, harm the markets for and value of the copyright holders' interests in its primetime programming in the longer term? Based on my more than 35 years of experience as an industrial organization economist, my knowledge of the television industry, and my review of discovery from ABC and other networks, my opinion is that no such harm would come to ABC, to the television networks or to rights holders generally. Specifically:

1. I have found no evidence of any current harm

In statements to investors and the public, ABC's executives have said that DVRs
with ad-skipping technology are good for ABC's business. Other senior
executives in the industry agree.

 ABC has not identified any actual empirical evidence of harm due to PTAT or AutoHop. My studies, on which I report below, describe factual evidence that does not reveal any material harm to ABC.

5

2. The number of households using PTAT and AutoHop is too small to have any effect on ABC

• The current and near term influence of the Hopper with PTAT and AutoHop is minimal because the installed base is so small as a fraction of U.S. households, and because even those customers who have PTAT with AutoHop do not necessarily skip ads. On average, those that do skip ads, watch more not less advertising because of the DVR's capacity to provide future time-shifted (not just real-time) viewings. For DVR households in general,



Online TV viewing time is small compared to overall TV viewing and widely
understood to be largely supplemental to traditional TV viewing; and thus, any
effect of PTAT and AutoHop on online streaming, at least in the near term, is not
material.

3. Market evidence shows that PTAT and AutoHop are not material to the networks' current or future prospects

- Neither Wall Street analysts nor the stock market itself has shown significant
 concerns over the impact of DISH's new technology on the fortunes of the
 broadcast networks. In fact, most analysts do not even mention ad-skipping
 technology as a business risk.
- Event study analysis of stock price reactions shows that the collective assessment
 of stock market participants was that PTAT and AutoHop were immaterial to the
 networks' business prospects.

4. PTAT and AutoHop will not trigger the demise of the TV ecosystem

- The value of network advertising has not declined but risen as video recording and ad-skipping technology has steadily improved. Network advertising prices rose and revenues remained robust in spite of steadily increasing penetration of videocassette recorders (VCRs), and more recently, DVRs into television households.
- ABC's claim that competition among cable and satellite providers will make AutoHop ubiquitous misrepresents the nature of competition for subscribers, which involves firms competing to provide a wide variety of differentiated, bundled services to viewers.
- More broadly, the context of ABC's complaint is a long history of opposition to technical change by incumbent dominant firms using means outside the market to forestall progress that might disturb their situation. Copyright holders since the time of the gramophone and the first photocopier have "cried wolf" about the threat of reproduction, and those cries claims that compensation and the incentive to produce would disappear have repeatedly and invariably been proven untrue.

5. PTAT with AutoHop may increase ad-viewing

•	DVR users watch more primetime ads than non-DVR users because increases in
	viewing hours have more than offset ad-skipping.

PTAT with AutoHop does not allow all ads to be skipped because it is not
available during live viewing or same-day playback. Any effect of PTAT with
AutoHop is incremental to the ad-skipping that would have occurred with existing

ad-skipping features, apart from any additional viewing of primetime programs due to PTAT.

- 6. DISH customers' use of PTAT does not affect the viewing of video-on-demand (VOD) offered by other cable and satellite providers or by other online services
 - ABC's claim that the Hopper with PTAT and AutoHop will adversely affect its
 VOD services revenue streams is unsupportable. DISH does not offer ABC VOD,
 so the availability of the Hopper with PTAT changes nothing.



- 7. It is not in the public interest to impair innovation or efficient consumer choice-making over the content that consumers watch
 - Consumers would have been vastly worse off had they been denied rights in the past to play recorded music, make photocopies and use videotapes for time-shifted viewing. In the same way, the public interest is best served by permitting consumers to make efficient choices about their consumption of television programs and commercials that come into their homes.
- 15. The remainder of this declaration analyzes the current, short-term and longer-term economic impact of the PTAT and AutoHop features on ABC.

 For the near-term future, I analyze potential impacts of PTAT and AutoHop on the Nielsen television audience ratings that matter

for ABC. I show that there can be no material effect on ABC from the Hopper. Examination of analyst reports and stock market reactions reveals no material impact on ABC, nor any expectation of future harm. I further examine the issue from a longer term perspective: the historical context, the evolution of ad-skipping and the incremental nature of the technology

introduced by DISH, the success of broadcast networks in adapting to technological innovation, and the possible competitive response to DISH's innovation.

II. ABC'S INTERNAL RESEARCH AND EXECUTIVES' STATEMENTS

A. "The Sky is Not Falling"

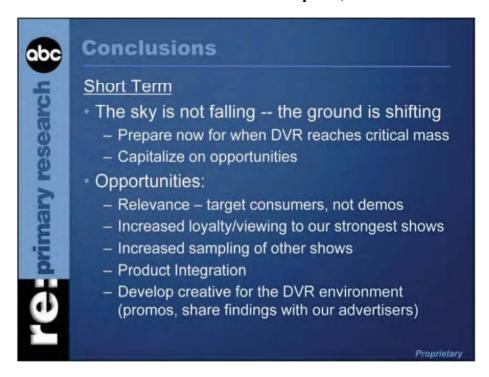
16. Since the advent of the DVR, "doomsayers have been saying that the DVR is sounding a death knell for the :30 [second] spot." As soon as DVR penetration was high enough (about 10 percent), ABC conducted a national study to investigate whether "evidence from early adopters of DVRs suggested a revolution in TV viewing." ABC was particularly concerned with the potential negative impact on ad revenue of time-shifting and "greatly enabled commercial avoidance." As reproduced below in Figure 1, the findings of its research, reported in October 2005, provided the basis for ABC's conclusion that "the sky is not falling" on ABC's broadcast TV business.⁸

Mark Loughney & Bryon Schafer, "DVR Research Update," Re: primary research, October 2005 (ABC 0136-0171, p. 2 (ABC 0137)). Mr. Loughney is ABC's VP of Sales and Strategy Research.

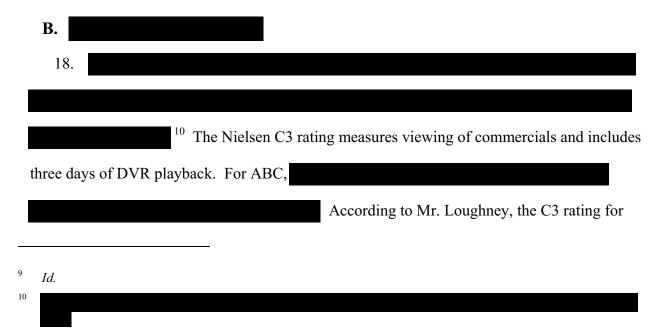
⁷ *Id.*

⁸ *Id.*, p. 14 (ABC 0185).

Figure 1
ABC Presentation: DVR Research Update, October 2005



17. ABC also concluded, among other things, that increasing DVR penetration presented commercial opportunities to increase viewing of their most popular programs and to increase the sampling of other programs.⁹





Declaration of Mark Loughney, dated November 19, 2012, ¶ 13.

¹² Exhibit 3a at ABC 3772.



See Exhibit 4.

¹⁴ *Id.* at 3776.

20. Robert Iger, the CEO of Disney, explained ABC's view that DVRs enhance its business model, in a 2011 earnings call with stock market analysts, as follows:

Five years ago, we would've been talking about just how devastating the impact of the DVR would have been on the Advertising business. So we're finding that with roughly 42% penetration of DVRs in the United States and **people who have DVRs watching substantially more TV, that the actual increase in ratings in DVR households** is pretty interesting. And now that we can sell on a C3 basis, maybe ultimately, we'll be able to sell even on a C7 basis. That's all monetizable. It's not all detrimental to our business model. **If anything you could argue, it's actually enhancing it.** 15

21. The opinion that the DVR benefits the broadcast networks is now the orthodox view.

For example, according to CBS chief executive Les Moonves: 16

The DVRs increased viewing and it increased the number of people who are watching the premium shows and even excluding those who zap the commercials, it is still a better proposition for us that the DVR came into account.

22. ABC VP of Sales and Strategy Research, Mark Loughney, testified at his October 19,

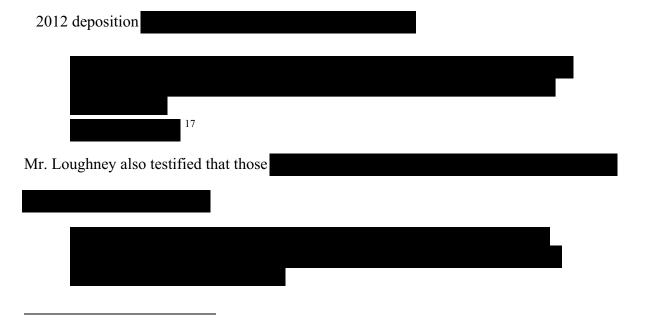
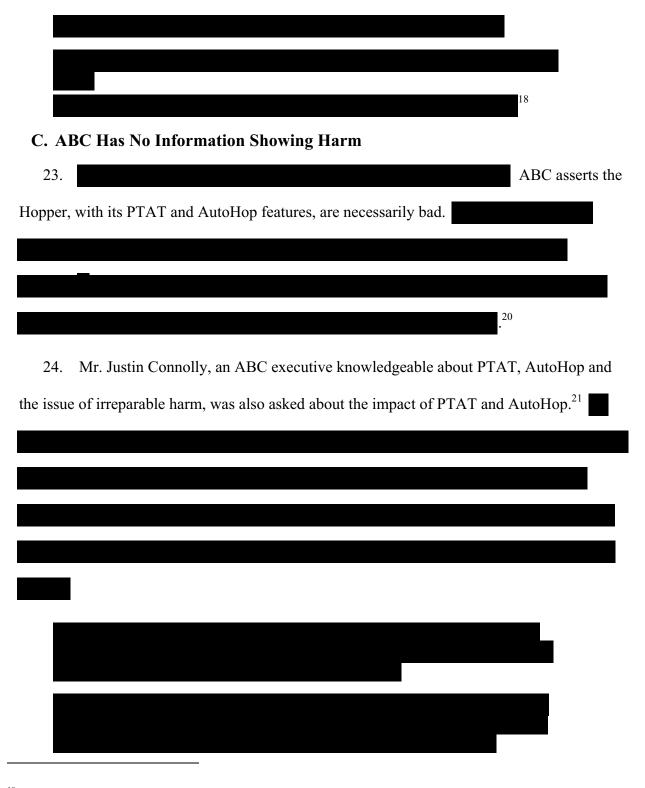


Exhibit 5, Seeking Alpha, Walt Disney, Q4 2011 Earnings Call, November 10, 2011 (emphasis added).

Exhibit 3b, FACTSET: callstreet, CBS Corp., Deutsche Bank Media & Telecom Conference, February 29, 2012 (emphasis added).

Deposition of Mark Loughney, October 19, 2012, p. 60.

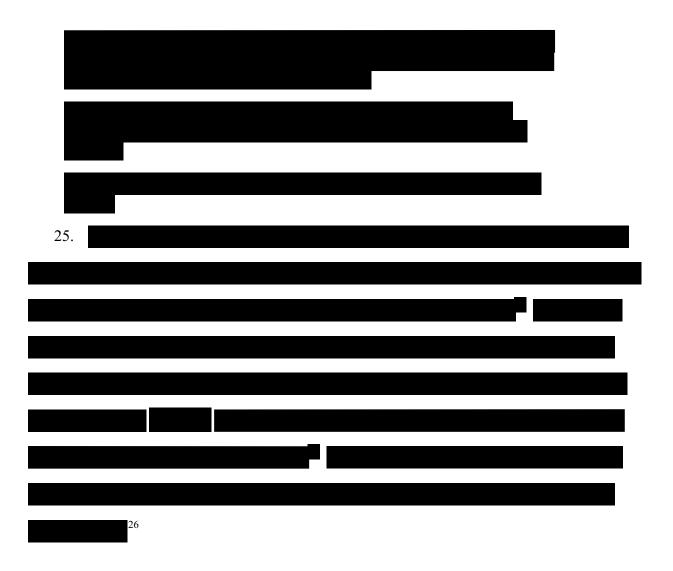


Deposition of Mark Loughney, October 19, 2012, pp. 62-63.

Deposition of Mark Loughney, October 19, 2012, p. 8.

Deposition of Mark Loughney, October 19, 2012, p. 88.

Deposition of Justin Connolly, October 19, 2012, pp. 10-11.



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Deposition of Justin Connolly, October 19, 2012, pp. 55-56 (emphasis added).

Deposition of Justin Connolly, October 19, 2012, pp. 67-77.

Deposition of Justin Connolly, October 19, 2012, pp. 120-2.

Declaration of Justin Connolly, dated November 19, 2012, ¶ 31.

D. ABC Views TV and Online Windows as Separate

- 26. The claim that DVR playback cannibalizes the market for commercial-free distribution of programs via Apple, Amazon or other online video delivery windows is contradicted by Disney's own executives. At a 2011 investment bank conference, Disney's Chief Financial Officer was asked about Disney's strategy in using new distribution technologies as exemplified by its investment in Hulu and its deals with Apple and Netflix. He responded that Disney's strategy was a "way that creates incremental revenue . . . [a]nd doesn't cannibalize the revenue from your existing ecosystem." ABC manages its distribution in other windows to avoid cannibalizing the revenues from its existing ecosystem. In this way, in Mr. Iger's words: "we kind of have our cake and eat it too." 28
- 27. Mr. Loughney has also expressed the view that digital video distribution, such as streaming video on tablets, is largely supplemental to traditional, scheduled (linear) TV viewing. Consequently, PTAT and AutoHop, which are features used to view TV, would be expected to have little effect on these supplemental distribution windows. He presented the results of research ABC conducted between April 2011 and January 2012 on the use of tablets to view TV programs.²⁹ ABC, and its survey partner Horowitz Associates Inc., concluded that:

Exhibit 3c, FACTSET: callstreet, Jay Rasulo, Senior Executive Vice President and Chief Financial Officer, The Walt Disney Co. at Credit Suisse Global Media and Communications Convergence Conference, March 8, 2011, pp. 1-2.

[&]quot;Actually, Disney Channel is achieving its highest ratings ever. The windowing strategy has morphed a bit from super aggressive to slightly less aggressive than we were because we felt we could still reap the rewards or the revenue of selling a window to Netflix. But, by windowing it out a little bit longer, meaning moving shows more out of season than in season, we kind of have our cake and eat it too approach, and that's where we're headed on that." Exhibit 3d, Bob Iger—Chairman and Chief Executive Officer, The Walt Disney Company, Sanford C. Bernstein Strategic Decisions Conference, May 30, 2012, p. 10.

Charles Kennedy, Senior VP, Research ABC Television Network; Mark Loughney, VP, Sales & Strategy Research, ABC Television Network; and, Adriana Waterston, VP, Marketing and Business Development, Horowitz Associates, Inc., "Shifting Sands...Understanding the New Customer," *The Advertising Research Foundation*, Re:think, Annual Convention + Insights Zone, March 25-28, 2012 ("ABC Re:think Annual Convention Presentation"), ABC 1824-1849.

"Not inherently cannibalistic to traditional TV, tablets allow consumers to take advantage of new locations and times of day to watch more video." 30

III. MARKET REACTIONS TO THE PRIMETIME ANYTIME AND AUTOHOP ANNOUNCEMENTS

28. ABC claims that PTAT and AutoHop pose a significant and immediate threat to its primetime TV business, but this is inconsistent with market evidence. Stock market investors' and Wall Street analysts' reactions to the introduction of these features show that PTAT and AutoHop have had no material effect to date, and can be expected to have no adverse effect on ABC through the date of trial.

A. The Introduction of PTAT and AutoHop

- 29. The Hopper with its PTAT feature was first announced at the Las Vegas Consumer Electronics Show on January 9, 2012³¹ and launched in mid-March.³² The AutoHop feature was announced and activated on May 10, 2012.³³
- 30. Reacting to the January Hopper announcement, DISH was reported by the *Financial Times* as characterizing the Hopper as a means for DISH to win back customers in the face of stiff competition by offering among the "most advanced" high-definition DVRs in the industry.³⁴ When AutoHop was announced, the *Wall Street Journal* stated that AutoHop

ABC Re:think Annual Convention Presentation, p. 6 (ABC 1829).

[&]quot;DISH Introduces Hopper and Joey—Next Generation Whole-Home HD DVR Entertainment System," January 9, 2012.

³² "Hopper Whole-Home HD DVR System Now Available From DISH," DISH Press Release, March 15, 2012.

[&]quot;DISH Introduces Commercial-Free TV With 'Auto Hop," May 10, 2012.

³⁴ David Gelles, "Dish seeks to lure back users with rebranding," *The Financial Times*, January 11, 2012.

would "heighten tensions between TV network owners and pay-TV distributors," renewing years-old concerns about ad-skipping. But the article went on to note that TV ad spending has increased even in the face of ad-skipping by the growing base of DVR users since 2003.³⁵ An analyst from SNL Kagan also noted that AutoHop "touches a nerve" with the networks, but in his analysis concluded that "the Hopper box as a percent of total industry DVRs is unlikely to have a significant impact."

31. The announcement of AutoHop was made a week before the TV networks held their upfront presentations. During these upfront presentations, network executives protested that AutoHop would undermine their advertising business and reportedly called AutoHop everything from "illegal" to "an insult." In fact, the upfront process was a success for ABC. SNL Kagan reported that ABC "essentially has wrapped up its upfront negotiations for the 2012-13 TV season with healthy price increases, and volume is on track to hit last year's \$2.5 billion." ABC itself characterized the upfronts as a success. In its August 2012 earnings call, Disney's Chief Financial Officer stated "we were very pleased with the strong demand ABC and ESPN enjoyed in the upfront, which is evidence that advertiser demand for our networks remains strong." In the same earnings call, Robert Iger, Disney's Chairman,

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Shalini Ramachandran, "Zap! New DVR Wipes Out Ads—By Adding 'AutoHop' Feature, Dish Network Spoils For Fight With Broadcasters," *The Wall Street Journal*, May 11, 2012.

³⁶ Ian Olgeirson, "Auto Hop touches a nerve; models point to limited impact," SNL Kagan, May 22, 2012.

³⁷ "Lawsuits Piling Up In the Hopper; Dish Network and broadcasters digging in for a fight over new technology," *Broadcasting & Cable*, May 28, 2012.

Deborah Yao, "ABC wraps up upfront talks; volume on track to hit \$2.5B," SNL Financial, June 13, 2012.

President and Chief Executive Officer, noted that ESPN "had a strong upfront. By the way, as did ABC, selling roughly 80% of its inventory in the upfront at increased rates."³⁹

B. Opinions of Equity Analysts

- 32. Many equity analysts follow, analyze and report on the prospects of network TV companies, including ABC, which is owned by the Walt Disney Company. With the assistance of my staff, I identified the most active analysts for which reports are available for purchase. We reviewed their most recent reports for each company following the AutoHop announcement, and I report the findings in this section.
- 33. Equity analysts generally forecast the future performance of the companies they follow and regularly revise their forecast in response to news they consider material. I examine whether the most active analysts considered the introduction of the Hopper with AutoHop to constitute a material risk to the ad-supported network TV business model employed by ABC. I include CBS in this and subsequent analyses because, unlike the other major TV networks, CBS is not part of a larger, more diversified corporation, so TV related issues are a more important factor influencing its performance and CBS is more sensitive to TV network related market developments.
- 34. I find that none of the most active analysts following The Walt Disney Company mentioned the Hopper or any generalized concern about time-shifted viewing or ad-skipping in their evaluations of the prospects of ABC. (Exhibit 6a.) Their comments on conditions in the

Exhibit 26, FACTSET: callstreet, The Walt Disney Company, Q3 2012 Earnings Call, Corrected Transcript, November 7, 2012.

My staff and I reviewed reports for the top 5 analysts ranked by the total number of reports issued during the 12 months ending August 14, 2012. The ranking and report selection procedure is described further in Exhibits 6a and 6b.

ad market were generally favorable and in some cases mentioned the susceptibility of ad revenue to declines in ratings as a risk factor. The risk disclosures made by these analysts, summarized in Exhibit 7a, are wide ranging, relating to each of the Disney segments:

Broadcast, Cable, Parks & Resorts, Studio Entertainment, Interactive Media, and other corporate risks.

- 35. Of the five most active analysts following CBS, only one, Doug Mitchelson of Deutsche Bank, mentioned the Hopper in his July 23, 2012 report, stating simply that "We see minimal risk from Aereo or the Hopper cases." (Exhibit 6b.)
- 36. The opinion that ad-skipping by DVR users is a minimal risk is shared and more fully articulated by Brian Wieser, ⁴¹ CBS equity analyst: ⁴²
 - ... DVRs have never been a meaningful threat because the bulk of television consumption occurs live (even in homes with DVRs) because consumers generally enjoy "flipping" channels and browsing an array of networks. They also use television as background viewing for as much as half of all viewing. Ad-skipping services restrain the ability of programmers to monetize a small portion of networks' most valuable programming but do nothing to limit the appeal of television *relative to other alternatives* other than to minutely alter sentiment towards the medium among marketers. This means that most of the same money would continue to flow into the medium.
- 37. Tony Wilbe of Janney Capital Markets echoes Wieser saying "ad-skipping risks [are] overstated." According to Wilbe, "our survey and analysis of time shifted viewing suggests that only 1% of advertising revenues is at risk given the viewing patterns and low penetration

Mr. Wieser is an advertising expert, formerly Senior VP and Global Forecasting Director of MagnaGlobal, a unit of the major global advertising agency Interpublic Group of Companies Inc. Brian Wieser was heralded by Ad Week as a "more-than-worthy replacement" for "Madison Avenue's unblinking oracle for 60 years" Bob Coen, chief forecaster at Magna, when he retired in March 2010. Anthony Crupi, "Brian Wieser: Magna's New Oracle," Ad Week, July 26, 2010.

Exhibit 3g, Brian Wieser, Pivotal Research Group, U.S. Equity Research: Advertising, "CBS: Policy Puts and Content Calls Initiating Coverage With BUY Rating, \$37 Price Target," June 4, 2012.

Exhibit 3h, Tony Wilbe, "Mountain or Molehill—DVR Survey Sizes DISH Ad Hop Threat," Janney Capital Markets, Entertainment & Digital Media, May 24, 2012.

of the technology." In this case the risk from PTAT and AutoHop is even smaller because it relates only to any incremental amount of ad-skipping due to using AutoHop rather than another ad-skipping feature. 44

38. The networks list the same ad-skipping risks as posing a long-term threat in their current SEC filings as they have for seven years. These risks are still treated as out-in-the-future possibilities rather than imminent threats. For example, JP Morgan analyst Michael Meltz stated prior to the Hopper announcement that "[n]ew technologies now allow consumers to skip advertisements—changes in consumer behavior could impact the demand for TV advertising longer-term." However, when he repeated this risk assessment again in February with respect to CBS, it was accompanied by a favorable investment recommendation based on the more immediate assessment that "[w]e think the estimate bias remains upward, and the stock should benefit from steady National advertising trends and growth in ancillary revenue streams [including retransmission and syndication]."

C. Credit Agency Debt Ratings Opinions

- 39. We use the credit ratings and associated ratings reports produced by the three principal credit rating agencies to test whether DISH's launch of the Hopper with its AutoHop functionality had a material effect on the rating agencies credit assessments for Disney and CBS.
- 40. There have been no credit rating revisions of senior unsecured debt by Moody's, Standard and Poor's or Fitch in relation to Disney or CBS since January 2012. (Exhibits 8a

⁴⁴ Moreover, increased ad-skipping may be offset by additional ad-viewing when more programs are viewed.

⁴⁵ Michael Meltz, CBS Corporation, J.P. Morgan, North America Equity Research, January 4, 2012.

Michael Meltz, "Q4,11 Results Basically In-Line; Ad Tone Remains Upbeat, CBS Stresses Momentum in Non-Ad Streams; Lifting Estimates," J.P. Morgan, February 16, 2012.

and 8b.) Furthermore, the credit rating outlooks for Disney and for CBS are stable. A credit rating outlook is a statement of the potential direction of a long-term credit rating over the intermediate term (typically six months to two years).⁴⁷ A stable outlook means that a credit rating is "not likely to change." By implication the "economic and/or fundamental business conditions" given "consideration" in setting the long-term credit rating are also "not likely to change."

D. Stock Price Reactions to PTAT and AutoHop Announcements and the Fox Preliminary Injunction Decision

- 41. A corollary of the economic theory of market efficiency⁴⁸ is that company stock prices respond quickly to news about material changes in business prospects. It follows that the economic materiality of news events can be evaluated by measuring the price reaction of companies' shares. The commonly used technique to measure price reactions to news is an event study. Because stock prices are determined by large numbers of investors with strong incentives to be careful about their money, stock price reactions provide an objective market-based measure of the importance of news.
- 42. Non-academic ordinary-course use of this reasoning is discernible in everyday business. For example, the recent \$1.05 billion damage verdict in Apple's patent victory over Samsung, if sustained on appeal, could result in a direct loss to Samsung of between one and about three billion dollars at some time in the future because of the potential for multiplying

⁴⁷ Standard & Poor's Ratings Definitions, June 22, 2012, http://www.standardandpoors.com/ratings/articles/en/us/.

According to the efficient market hypothesis, originally formulated and tested by the financial economist Professor Eugene Fama of the University of Chicago Booth School of Business, the price of a security traded in an efficient market (under the semi-strong form of efficiency) responds quickly to all relevant publicly available information. The markets for stocks of major corporations traded on major U.S. exchanges are generally found to be semi-strong form efficient. B. G. Malkiel and E. F. Fama, Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*, 25: 383–417 (1970).

damages for willfulness. On announcement of the verdict, Samsung's market capitalization the value of the firm measured by the share price times the number of outstanding shares plunged by more than \$12 billion. Business journalists took this as a sign that investors were concerned that the patent controversy and its aftermath would jeopardize sales of Samsung's accused products (if an injunction were granted).⁴⁹

- 43. The reactions of network TV company stock prices to the announcement of the Hopper, PTAT and AutoHop reveal the extent to which market participants viewed these developments as material to future earnings. Ad-skipping features were already widespread, so the reactions to these announcements provide a way to assess any incremental ad-skipping effect of the Hopper, PTAT and AutoHop. Under the semi-strong form of the efficient market hypothesis, all public information on the prospects for the companies is quickly reflected in the network TV company stock prices. This means that, following the announcements, stock prices incorporated: (a) the expected effect of the future roll-out of the Hopper to new and existing DISH customers; ⁵⁰ (b) any expected, sizeable influence of PTAT and AutoHop on future upfront ad negotiations and revenues; and (c) the probability that the launch of the Hopper would prompt other similar technologies to be introduced. ⁵¹
- 44. The event study is a standard econometric technique, routinely used in, among other situations, securities class action litigation involving publicly held companies to assess materiality, causation and damages in connection with alleged corporate misstatements or

⁴⁹ For example, "UPDATE 5-Samsung shares drop \$12 bln after Apple's court victory," Reuters, August 26, 2012.

See *e.g.* Exhibit 3e, Ian Olgeirson, "Auto Hop touches a nerve; models point to limited impact," *SNL Kagan*, May 22, 2012.

See *e.g.* Steven Musil, "DirecTV sitting on TV commercial-skipping technology, Satellite provider's chief points out that the company bought technology similar to DISH's five years ago but says it hasn't seen a demand for it yet." *CNET.com*, June 11, 2012.

omissions.⁵² The event study is performed by first estimating a market model to predict stock price returns that would be expected in the absence of material company specific news. Expected returns are then compared to actual returns observed following the events and the size of any excess return used to determine whether there was a statistically significant price reaction.

- 45. First I tested dates on which Disney reported quarterly earnings and found that statistically significant price increases occurred in response to positive news and statistically significant price decreases occurred in response to bad news. I then tested the Hopper and AutoHop announcement dates and found that there was no statistically significant price reaction on these dates, with the exception of Disney on May 10, 2012, when there was a coincident announcement of positive company news that is consistent with the observed stock price rise. I also tested the reaction to the publication of the judge's decision to deny Fox Broadcasting Company's motion for a preliminary injunction (Fox PI motion)⁵³ in its similar case against DISH. Again, I found no statistically significant price reaction, revealing that this news was not considered by market participants to be material to the prospects of ABC. The results of these tests are documented in Exhibit 9a.
- 46. As with my review of analyst opinion, I performed this analysis on CBS as well as on ABC. I tested dates on which CBS reported quarterly earnings and found that statistically significant price increases occurred in response to positive news and statistically significant

See *e.g.* Dr. David Tabak & Dr. Fred Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," NERA Economic Consulting, April 1, 1999.

Order re Plaintiffs' Motion for Preliminary Injunction, Fox Broadcasting Company, Inc., Twentieth Century Fox Film Corp., and Fox Television Holdings. Inc. v. DISH Network L.L.C. and DISH Network Corp, Case No. CV12-04529 DMG (SHx), November 7, 2012. The denial of the motion became public the same day (see e.g. Shalini Ramachandran, "Court Blocks Fox Broadcasting From Shutting Down Dish Network's Ad-Skipping DVR," Dow Jones News Service, November 7, 2012.)

price decreases occurred in response to bad news. I then tested the Hopper and AutoHop announcement dates and found that there was no statistically significant price reaction on these dates.⁵⁴ I also tested the date the Fox preliminary injunction motion was denied, but this was confounded by the coincident announcement by CBS that it had exceeded analysts' quarterly earnings expectations. There was a statistically significant price increase in response. The results of these tests are documented in Exhibit 9b.

This price reaction analysis provides evidence that market participants did not consider the Hopper or the AutoHop functionality to materially affect the business prospects of Disney or CBS.

E. Collective Opinion is that the Hopper Poses No Material Threat to Network TV

48. The collective opinion of analysts, stock market participants and credit rating agencies is that the Hopper poses no material risk to the traditional Network TV business model. My event study, which reveals no price reaction in network shares to the announced advent of DISH's DVR technology, confirms these findings.

IV. HISTORY OF NETWORK OPPOSITION TO CHANGING TECHNOLOGY OF VIEWER CONTROL

The broadcast networks' warnings about the threat posed for the traditional TV business ecosystem by DVRs have now been revealed to have been unwarranted. The sky is not falling on the 30-second ad. In fact, the opposite is true. The

Id.

broadcast networks have historically and consistently opposed new technology that turned out to be beneficial to themselves as well as to consumers. In the words of CBS Chief executive Les Moonves:

Well, look, historically, every time technology comes in, they say, oh my god, it's going to hurt the broadcast networks. And if you look back, nothing could be further from the truth. The DVR was going to be the death of us. The DVRs increased viewing . . . ⁵⁵

- 50. The controversy over the features of the Hopper before this court fits into a consistent and important theme in the history of technology. Understanding this historical context is important to appreciating the potential effects of permitting or deterring the adoption of new ad-skipping technology on markets for television programs markets that include the interests of both producers and consumers of these works. Above all, understanding the historical context illuminates the effect of such a decision on the public interest.
- 51. Economists and historians have known for many decades that the force in the American economy that is most responsible for improvements in our standard of living is technological change (synonym innovation). This is a long-standing and uncontroversial insight. The rewards to consumers of innovation are enormous. Robert Solow's often quoted, Nobel-winning contribution to economics in the 1950s was the initial demonstration that most of the increase in the output of goods and services that we enjoy comes from productivity-increasing technological change rather than from increased use of labor or capital in our production processes.⁵⁶ A half-century of studying the nature of demand has led other

Exhibit 3b at 5.

Robert Solow, *Technical Change and the Aggregate Production Function*, The Review of Economics and Statistics, Vol. 39, No. 3, (MIT Press, 1957). pp. 312-320.

economists to conclude that the added value to consumers of new goods, new product characteristics and new services (or newer versions of old ones) is very great.⁵⁷

- 52. Although the economy as a whole and its consumers benefit greatly from technological change, when innovation disturbs the status quo, invariably opposition to change arises from those whose interests lie in avoiding the disturbance. One competitive and beneficial form of response is to adapt by innovating in turn and let the market decide which new technology or business method represents the most desirable form of progress. More common in history is for incumbents to engage in what economists call "rent-seeking" behavior—using forces other than market forces such as litigation or lobbying to keep the status quo in place.
- 53. One of the foremost contemporary scholars and authors on the history of technology is Joel Mokyr. Better to quote his commentary on the subject than to devote space here to numerous examples of opposition to technological innovation:

Economists have used the term "rent-seeking" for the replacement of market decisions by government control or some other form of collective decision-making that benefits a small group or an individual. It is natural to expand the standard definition of rent-seeking to include "loss-avoidance." Technological progress inevitably involves losers, and these losers—as in free trade—tend to be concentrated and usually find it easy to organize. The potential gains, on the other hand, are diffuse and tend to accrue largely to dispersed consumers or lonely inventors, unfamiliar with the political arena. The political economy of technological change thus predicts that it will be resisted by well-organized lobbies, whereas its defenders will usually be a motley group of consumers and inventors and perhaps a few groups with a direct interest in economic growth. The struggle between the two parties will always take the form of a non-market process because relying on market forces alone would, by definition, lead to the triumph of the new

Jerry A. Hausman, Valuation of New Goods under Perfect and Imperfect Competition, The Economics of New Goods, (University of Chicago Press, 1996). pp. 207-248; and Robert J. Gordon and Zvi Griliches, Quality Change and New Products, The American Economic Review, Vol. 87, No. 2, (American Economic Association, 1997). pp. 84-88.

technology. Because non-market conflicts over technology vary enormously in their nature, there is no way to predict their outcome. However, such struggles eventually end in the victory of conservative forces and terminate progress if the winners can then change the decision rule in favor of conservatism to cement the status quo.⁵⁸

Mokyr's point is that these efforts harm progress and prosperity. This is the context into which squarely fit the efforts of television broadcasters to thwart consumer control over the advertising that comes into their homes.

A. Broadcasters' Efforts to Constrain Progress in Consumer Control Over Television Recording

54. In the discussion that follows, I relate the story of attempts by broadcasters and program producers to prevent consumers from managing their intake of television advertising. I note at the outset of my discussion that in all cases, including the current controversy, these technological attempts at managing TV ads are limited in that they do not involve real-time management (*e.g.* channel changing or "time-away"). That is to say, the issue of ad-skipping has arisen to date only in time-delayed viewing. There has been, and is now, no automatic technology for ad-skipping in real time and so whatever harms may have been alleged in connection with these recording technologies, they have no effect on a viewer who, as most of us do most of the time, simply sits down to watch unrecorded real-time (*i.e.* "live") TV. I acknowledge, however, that there may be viewers who do use the DVR to avoid real-time advertising, who find certain television advertising so noisome that they will deliberately delay their viewing by some period of time just for the sake of avoiding the ads. In economic terms, these viewers on these occasions pay a price in waiting time to avoid the commercials. Efforts

Joel Mokyr, *The Gifts of Athena: Historical Origins of the Knowledge Economy* (Princeton and Oxford: Princeton University Press, 2002). pp. 253-4.

by the networks to forestall the development of efficient ad-skipping technology are particularly harmful to this set of viewers.

B. The Betamax Case

- 55. As is well-known, the technology at issue in the 1984 Betamax case was the simple VCR that enabled a consumer to record television programs on tape, mainly for the sake of time-shifting. This technology also created the ability to fast-forward through advertisements during playback and on recording.
- 56. In 1984, the Supreme Court, in *Sony Corp of America v. Universal Studios Inc., et al.*, overturned a 9th Circuit reversal of a trial court dismissal of a copyright action on fair-use grounds and, in essence, allowed Sony to make and sell VCRs (identified in the opinion as video tape recorders or VTRs). The trial court heard evidence on harm. First,

[p]laintiffs admitted that at the time of trial, no existing contract, license or advantageous business relationship of either Universal or Disney had been injured, interfered with or disrupted by the sale or use of Betamax and Betamax tapes or by any other activity of any defendant.⁵⁹

Nevertheless,

[p]laintiffs did present extensive expert testimony at trial on the issue of prospective harm. Executives of both Universal and Disney testified that in the future Betamax would decrease the value of their copyrights in a number of ways, *E.g.*, by exhausting interest in reruns and by fragmenting the live television audience.

The District Court opinion noted further that experts opining on future harms "... were unable to predict at what point in either time or Betamax sales such harm would occur."

[&]quot;In addition, plaintiffs conceded that neither the sale nor the use of Betamax and Betamax tapes had by the time of trial caused Universal or Disney any measurable monetary damage, economic loss or revenue loss. 1978 was a very successful year for both Universal and Disney. It was Disney's eleventh consecutive year of increased profit and the most profitable year in history for Universal Pictures' Theatrical Division. Universal's television revenues had increased steadily over the three years prior to trial and Disney received its highest television income in 1978." *Universal City Studios, Inc, et al.*, v. Sony Corp., District Court Opinion, October 2, 1979.

- 57. In short, the so-called harms that the networks claimed would be fall them if viewers were permitted to exercise some control over the programming they watched beyond "on," "off" and "change channel" were implausible at the time the contentions were made and, as we shall see, never came to pass.
- 58. As the Supreme Court noted: "... even the two respondents in this case, who do assert objections to time-shifting in this litigation, were unable to prove that the practice has impaired the commercial value of their copyrights or has created any likelihood of future harm."

C. The Replay TV Case

- 59. In 2001 several networks and movie studios filed suit alleging copyright violation against ReplayTV, a subsidiary of SONICblue which produced and distributed a DVR (ReplayTV) capable of automatic ad-skipping (Auto-Skip).⁶¹ The device was also designed to enable internet-based program-sharing with other viewers. We have no trial court decision in that litigation, as SONICblue, ReplayTV's parent, was driven into bankruptcy, apparently by the cost of the litigation.⁶²
- 60. The complaint in the ReplayTV case, filed by The National Broadcasting Company (NBC), CBS Broadcasting Inc. (CBS), The American Broadcasting Company (ABC), Viacom, Paramount and Disney, is short on specific allegations of adverse effects or harm to the markets for or values of copyright works. On that subject, the complaint alleged that:

⁶⁰ Sony Corp of America v. Universal Studios Inc., et al., Supreme Court Opinion, January 17, 1984.

Roy Furchgott, "Don't People Want to Control Their TV's?" *The New York Times*, August 24, 2000.

Ethan Notkin, Television Remixed: The Controversy Over Commercial-Skipping, (Fordham Intellectual Property, Media and Entertainment Law Journal), vol. 16, 899, 2006, p. 917, citing Michael Freedman, Hollywood Goes Local, Forbes.com, April 30, 2003.

Defendants' unlawful scheme attacks the fundamental economic underpinnings of free television and basic nonbroadcast services and, hence, the means by which plaintiffs' copyrighted works are paid for. Advertisers will not pay to have their advertisements placed within television programming delivered to viewers when the advertisements will be invisible to those viewers. In effect, by eliminating the embedded advertising, defendants' copying-and-commercial-deletion feature will (as to those viewers who employ the feature) eliminate the source of payment to the copyright owner for the very program being viewed.⁶³

61. Although SONICblue was driven from the market, TiVo and other DVR makers continued to create newer and better DVRs that improved due to the reduced cost and space requirements of storage technology, the ability to record multiple programs simultaneously, and advances in control and ad-skipping ability.

D. Mistaken Predictions of Harm from Ad-Skipping and Recording

- 62. In addition to the legal claims of harm arising from improvements in television recording and ad-skipping capability, the networks, program producers and industry executives have made a practice of predicting doomsday outcomes from consumer control over their TVs.
- 63. In the early 1980s, after the VCR first made its appearance, the Motion Picture Association of America, by its president Jack Valenti, told Congress:

[T]he VCR is stripping . . . those markets clean of our profit potential, you are going to have devastation in this marketplace. . . . We are going to bleed and bleed and hemorrhage, unless this Congress at least protects one industry that is able to retrieve a surplus balance of trade and whose total future depends on its protection from the savagery and the ravages of this machine.

He then famously added:

Paramount, et al. v. ReplayTV, et al., Complaint, ¶ 7.

I say to you that the VCR is to the American film producer and the American public as the Boston strangler is to the woman home alone. ⁶⁴

64. Over the course of the years to come, as recording and ad-skipping technology improved, industry executives issued less colorful, but in retrospect nearly as unbelievable, predictions of doom. For example, Jamie Kellner, CEO of Turner Broadcasting, was quoted as follows in a 2002 article on ad-skipping:

The free television we've all enjoyed for so many years is based on us watching these commercials. There's no Santa Claus. If you don't watch the commercials, someone's going to have to pay for the television and it's going to be you.⁶⁵

Yet even as cable network channels proliferate and subdivide the television audience, adsupported network television continues to succeed as other old media diminish.

E. Network Performance: Audience, Ad Volumes Prices and Revenues

65. As the technology of TV recording and ad-skipping improved in an environment of continuous, rapid technological progress in electronic media, the measures of TV audience and the value of TV advertising increased to the benefit of the networks. Although broadcast network audience share declined with the increasing availability of other programming, the networks enjoyed gains in the volume and value of their advertising. Whatever harms the networks forecast from the steady improvement in viewers' storage and ad-skipping capability never happened. Meanwhile, as technical change fostered alternate methods for delivering programming to consumers, the networks creatively altered their former advertising-only business model, adding profitable new revenue streams. The broadcasters' business model is

Home Recording of Copyrighted Works: Hearings on H.R. 4783, H.R. 4794, H.R. 4808, H.R. 5250, H.R. 5488 and H.R. 5705 Before the Subcommittee on Courts, Civil Liberties and the Administration of Justice of the House Committee on the Judiciary, 97th Congress 8 (1982).

^{65 &}quot;Skip-the-Ads TV has Madison Avenue Upset," *The New York Times*, May 23, 2002.

robust because it is dynamic that is, capable of evolutionary change in response to changing technology.

- 66. In the decades since the Betamax case, new and enormously attractive advertising media have proliferated: internet websites and search engines, video games, smartphone- and tablet-apps and YouTube, for example. Print ad media (newspapers and magazines) find survival a challenge in this hostile competitive environment. Yet the American love affair with television remains strong. The average Nielsen households watches 8 hours and 21 minutes of television per day, up from 6 hours and 36 minutes in 1980. Television advertising, in consequence, remains a dominant ad medium.
- 67. The tables and chart that accompany this section tell the long-term story. Since the Betamax era, TV households have grown steadily in line with total U.S. households at about one percent per year (Exhibit 10). VCR penetration reached a high of 90 percent during 1985-2012, and DVR penetration, first measured by Nielsen in 2006, has now grown to over 40 percent of TV households (Exhibit 11). In 2011, about 90 percent of TV households received their television via wired cable and DBS,

(Exhibit 12).

[&]quot;IAB Internet Advertising Revenue Report, 2011 Full Year Results," Internet Advertising Bureau, April 2012, pp. 8, 12-14.

David Carr, "Mourning Old Media's Decline," *The New York Times*, October 28, 2008.

As of 2009, according to the Television Bureau of Advertising (TVB), the "time Americans spend viewing television has been growing steadily since the medium first emerged nearly 60 years ago. This growth was fueled by a variety of factors over the decades: multi-set and color TV households increased, the selection of 24-hour programming options expanded, and such technologies as the VCR and DVR gave viewers ever increasing control. By 2008, time spent viewing TV was at an all-time high." (TVB, TV Basics, June 2012, p. 6.)

68. Over the last 20 years or more, broadcast network primetime audience share has been
in decline but ad cost per minute rose in nominal terms. Over the last few years, as DVR
penetration has risen,
(Exhibit 15).
69. From the media research firm SNL Kagan we have an estimate of advertising
revenues of four of the major networks (Exhibit 16). As the table shows, revenues declined
somewhat in 2009 at the depth of the business downturn following the financial crisis, but
recovered from that somewhat. Like the rest of the economy, ABC, NBC, and CBS have not
had their broadcast ad revenues return to 2007, pre-crisis levels.
70. Through 2007, ABC experienced an upward trend in ad revenue, at the same time

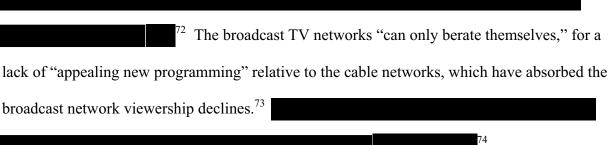
that consumers were enjoying improvements in television recording technology through

Since that time ABC's ad revenues were

widespread use of the DVR. At the start of 2006, DVR penetration

affected by the recent recession, but have remained stable since 2009, while DVR penetration has increased rapidly (Exhibit 10).

71. CBS and ABC executives have suggested that an increase in time-shifted viewing has depressed their 2012/13 ratings because only the first three days of playback are counted in Nielsen ratings.⁶⁹ In fact, as analysts with access to the data are now reporting,⁷⁰ existing DVR users are not time-shifting more and the small increase in DVR penetration does not come close to explaining the more than 10 percent drops in ratings seen for ABC, CBS and Fox.⁷¹



72

[&]quot;Media executives, including CBS Chief Executive Leslie Moonves and Disney CEO Robert Iger, have attributed at least some of that to delayed viewing, advocating that ratings based on program viewership up to seven days out (known as C7) be made the advertising-industry standard, as opposed to the current three (known as C3)." (M. Gottfried, "Networks Can Only Berate Themselves," *The Wall Street Journal Online*, December 4, 2012.)

[&]quot;Audiences are leaving but the balance of our data suggests [over-the-air] OTT and the DVR are not to be blamed for this month's weakness, which suggests there is another unknown factor (bad programming? social media?)" Tony Wible and Murali Sankar, "September Next Gen Ratings - OTT Attrition Stabilizes," Media and Entertainment, Janney Capital Markets, October 16, 2012.

⁷¹ Emily Steel, "US TV Networks suffer sharp dip in ratings," *The Financial Times*, November 11, 2012.

M. Gottfried, "Networks Can Only Berate Themselves," *The Wall Street Journal Online*, December 4, 2012.

When asked about the decline in ABC ratings, CEO Bob Iger noted two factors: (1) DVR penetration leading to time-shifted viewing and (2) ABC's lack of a new "hit show." "[ABC suffered from an] absence of what I'll call new, big, real buzzworthy hits," Iger said. He went on to note that NBC's ratings performed much better thanks in large part to hit show *The Voice*. (FACTSET: callstreet, The Walt Disney Co., Q4 2012 Earnings Call, Corrected Transcript, November 8, 2012.) See Exhibit 17.

F. Conclusion

- 72. The conclusions to be drawn from this history are easily summarized. The television networks complained over the course of decades that to permit increased control by viewers over the program and commercial content entering their homes would harm and possibly destroy the networks' business. In fact, the networks have thrived even in the face of increasing competition from new advertising media. While broadcast network viewing has declined with the rise of cable and DBS distribution networks, the volume of broadcast network commercial time watched by viewers and bought by advertisers has only increased. Claims and predictions that the sky would fall have always been mistaken.
- 73. It is well known that the player piano, gramophone, radio, photocopier, cable television, cassette recorder, satellite radio, and of course the VCR were all at one time or another pronounced fatal to the production of music, reading matter, television and so on.⁷⁵ The stories told in ABC's pleadings and declarations about how an improved DVR will kill network television are cut from the same cloth.

V. NO EVIDENCE OF ALLEGED HARM TO ABC'S TV ADVERTISING REVENUE

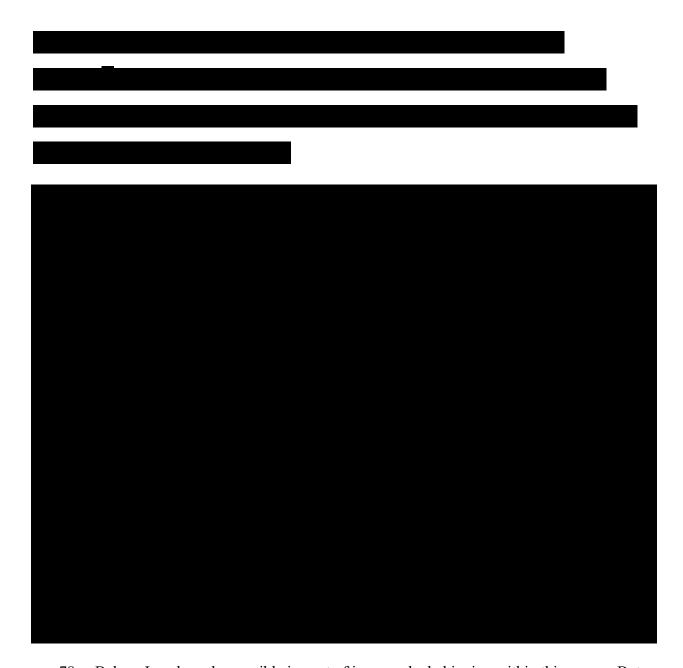


For example, see Exhibit 3i, Nate Anderson, 100 Years of Big Content Fearing Technology—In Its Own Words, *Ars Technica*, October 11, 2009.

⁷⁶ See Exhibit 18.

75. In the longer term, any possible effect of AutoHop must take account of potential offsetting increases in viewing due to PTAT and the extent of ad-skipping that would occur even without AutoHop. Any possible effect of AutoHop on ad-skipping is limited to the small fraction of viewing by PTAT users that occurs during the three day period after a program airs, and then only to the extent that viewers who were not already skipping ads by other means decide to use AutoHop and do not offset such incremental ad-skipping by increased viewership of live, same-day playback or other playback without AutoHop. Television viewers are increasingly engaging in social networking while watching primetime television, which creates an additional incentive for live or same-day viewing, further reducing the impact of the AutoHop ad-skipping feature.

A
76.
77.
There are almost 115 million TV households in the U.S. DISH has about
14.5 million customers.



78. Below, I analyze the possible impact of increased ad-skipping within this group. But first it is important to understand the commercial importance of ratings to the networks and how these ratings are measured.

⁷⁸ See Exhibit 18.

B.

79. Networks and their primetime advertisers care about ad views by 18-49 year-olds over the three days from a commercial's live airing as measured by Nielsen's C3 ratings.

1. Nielsen C3 rating explained

- 80. A television rating is the percentage of television households (including those not watching TV) that are tuned to a particular program. Ratings, reported by the Nielsen Company, form the standard audience measure on which networks, not just ABC, negotiate with advertisers the amount the advertisers will pay for airing their ads. Nielsen produces a variety of ratings estimates, including both household-level and person-level ratings. Ratings are measured for different demographic groups, including age and gender categories.
- 81. Before 2006, the principal network ratings were "live" estimates, meaning that they represented viewing that occurred during the actual broadcast of the program. Beginning in 2006, Nielsen began offering ratings estimates that incorporate DVR playback. Nielsen now offers several "streams" of data, including Live, Live plus same-day viewing, Live plus 3 days of viewing, and Live plus 7 days of viewing. In addition to the ratings that Nielsen produces for television programs, it also produces corresponding ratings for the commercial minutes that

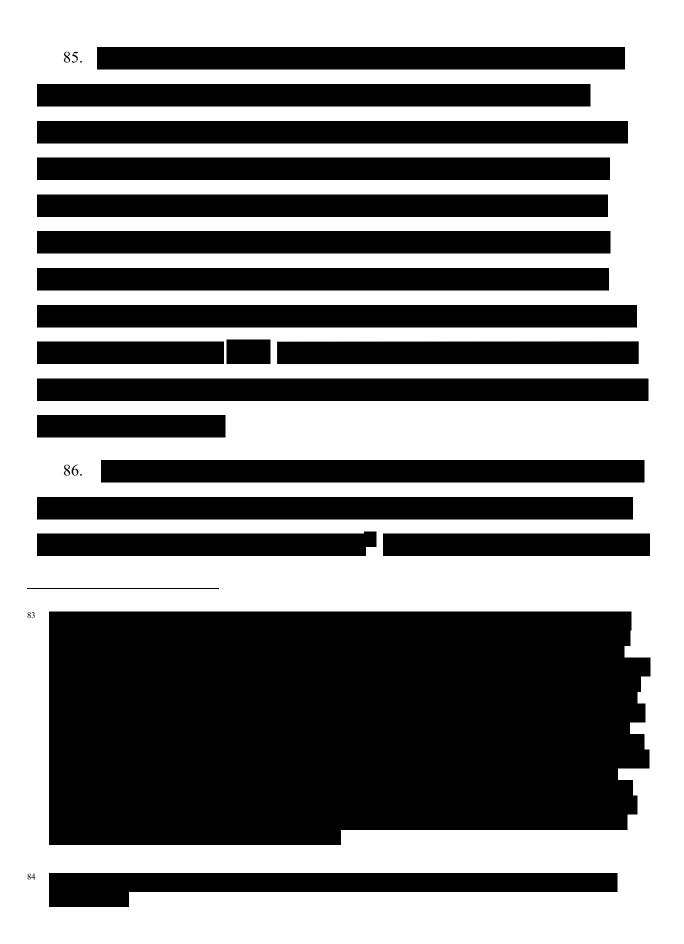
⁷⁹

air during a program. Since 2007, the commercial ratings measured for Live plus 3 days of viewing, known as C3 ratings, have become the standard basis for national advertising rates.

82. The Nielsen C3 rating measures viewing of commercials and includes three days of DVR playback. 83.

McGovern Declaration, ¶ 5.

Nielsen, 2011 National Reference Supplement, p. 1-1.



1		

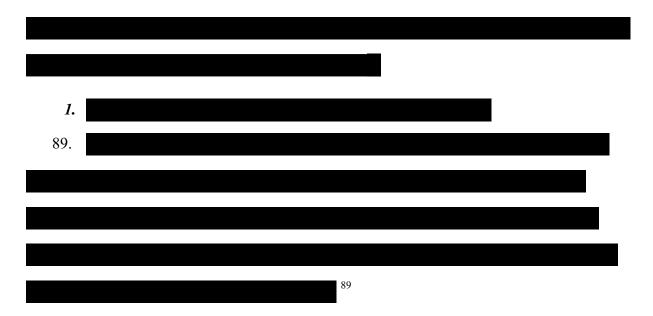
C. No Longer-Term Threat

- 87. In seeking a preliminary injunction, ABC has argued that it is likely to succeed on the merits of its copyright infringement claim and specifically that PTAT and AutoHop will be found to be a threat to existing or potential markets for ABC's primetime programs over the longer term. I disagree. Just as ABC found that I find that the ad-avoidance effect is not necessarily material and further depends on whether the Hopper with PTAT increases primetime viewing.
- 88. Existing ad-skipping behavior means that most people who wish to avoid ads already have the means to do so, narrowing the scope for any decrease in aggregate ad-viewing due to AutoHop. Furthermore, as noted by a broadcast network executive

⁸⁵

ABC Memorandum in Support of a Preliminary Injunction, pp. 23-26.

Exhibit 4.



- 90. Television viewers have been time-shifting since the advent of the VCR. In 1987, when Nielsen began using the People Meter for its national sample, it allowed VCR recordings to contribute to a program's live ratings estimate, regardless of whether (or when) the recording was replayed. At the time, the VCR market was in a growth phase, with the percentage of TV households that owned a VCR rising from 21 percent in 1985 to 69 percent in 1990. By 2005, an estimated 90 percent of TV households owned a VCR. 91
- 91. Incremental improvement in DVR technology has, among other things, improved the efficiency of ad-skipping through the 30-second skip function. Ironically, these developments were pioneered to some extent by TiVo, a company that was started with the help of the TV

⁸⁹See Dobrow, Julie (ed). 1990. Social and Cultural Aspects of VCR Use, p. 62.

⁹¹ TVB, TV Basics, June 2012, p. 2.

networks.⁹² By pressing the 30-second skip button on a DVR remote control several times in quick succession, all the ads in a commercial break can be completely skipped. This is close to functionally equivalent to the AutoHop feature, although in the case of AutoHop, a single selection of the skip feature is required to skip all the ads in the commercial segments during a particular program. The principal differences between the 30-second skip and AutoHop are the number of times the skip feature is selected and the need to manually activate the 30-second skip feature is now ubiquitous, being offered by most of the top cable and satellite providers. Thus, absent AutoHop, some viewers disinclined to watch commercials would avoid them anyway, even if the effort of doing so would be slightly greater.

92.	Most significant for present purposes,	
		While
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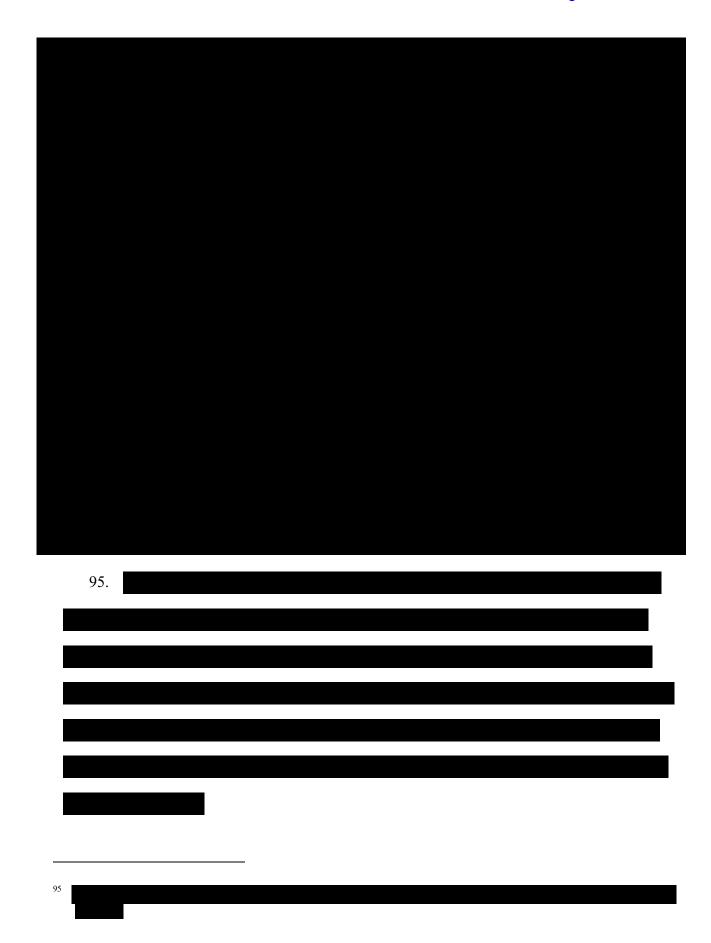
DVR recording presents an opportunity for viewers to reduce their intake of TV advertising by ad-skipping, it also increases their opportunity for ad-viewing by expanding viewing options. Recording programs can lead to more viewing through time-shifting and by eliminating conflicts (*e.g.* two programs broadcast at the same time).

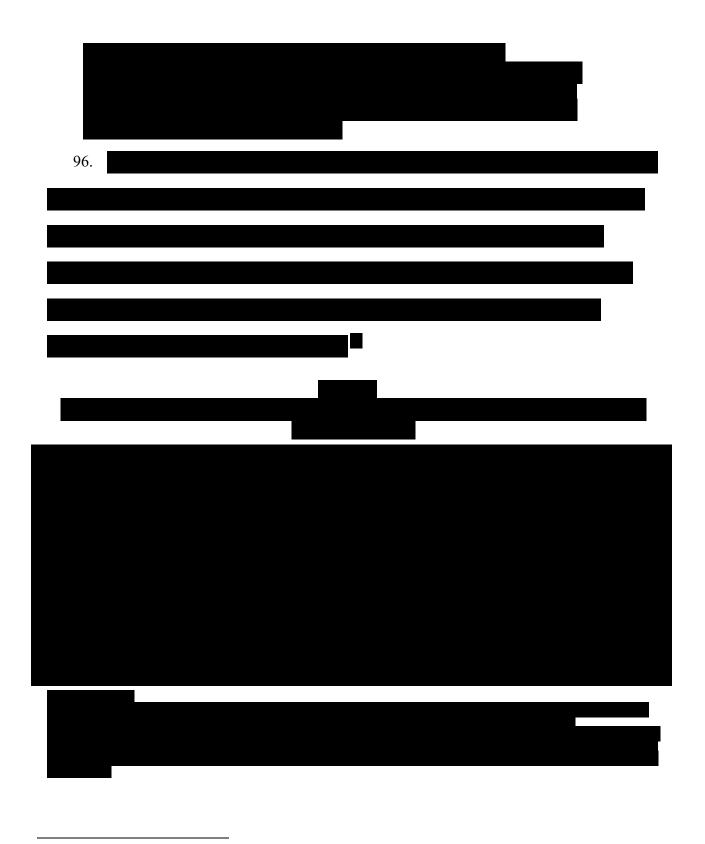


According to TiVo's 1999 10-K at page 25: "Net cash provided by financing activities was \$183.3 million for the year ended December 31, 1999. Of this amount, \$90.6 million was received from the issuance of Series D, E, F, G, H, I and J preferred stock to several investors, including Vulcan Ventures Incorporated, Showtime Networks, Inc., DIRECTV, NBC Multimedia, Inc., Philips Corporate External Ventures B.V., Advance/Newhouse, CBS Corporation, Comcast Interactive, Cox Communication, Discovery Communications, Liberty Media Corporation, TV Guide Interactive, The Walt Disney Company (through its wholly owned subsidiary Catalyst Investments L.L.C.), America Online, Inc. and Sony Corporation of America, Inc."









⁹⁶ Echtman Declaration, Exhibit 8.

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100. AutoHop is a more efficient way to skip ads, but because it functions differently from pre-existing fast forward and 30-second skip features, it may not be preferred by all viewers. Further, even for viewers who prefer AutoHop to their pre-existing ad-skipping technology, using AutoHop instead of a 30-second skip would not necessarily increase the overall amount of ad-skipping. The overall fraction of ads skipped would only increase if viewers chose to skip more ads by using AutoHop than by using the pre-existing technology. Mr. Loughney asserts in his Declaration that viewers who do not skip ads either find skipping burdensome or do not know how to skip, and in both cases they would choose to use AutoHop at every opportunity. But this is pure conjecture. ABC has not presented any empirical evidence that this would happen.

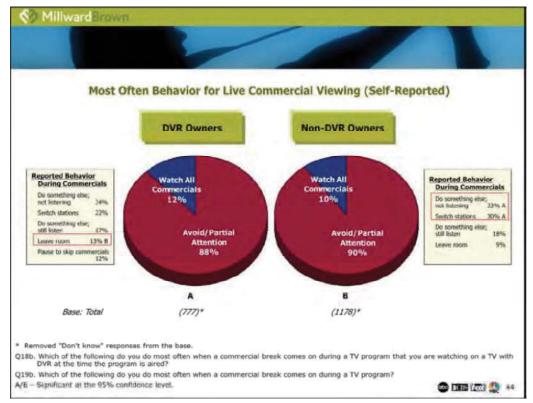
101. One way to examine whether viewers skip more ads when ad-skipping technology improves is to look back at how viewers reacted to previous improvements in ad-skipping technology and whether the proportion of ads skipped has increased over time with technological improvements. ABC's own studies of DVR use compare ad avoidance behavior of non-DVR users to ad-skipping behavior of DVR users (Figure 7). Interestingly, the levels of ad avoidance are similar between non-DVR and DVR users.

If PTAT is activated it can record six channels at once, and PTAT makes eight days of primetime shows available at one time.

Loughney Declaration, ¶ 19.

Loughney Declaration, Exhibit 7, "Millward Brown's DVR Ad Impact Study 2006, Detailed Findings Prepared for ABC, CBS, FOX and NBC," April 2006, ABC 0188-ABC 0257 (ABC0223).

Figure 7
ABC Presentation: Millward Brown's DVR Ad Impact Study 2006



102. In ABC's research studies produced in this case, the ad-skipping technology available to the DVR users was fast forwarding. The more efficient and convenient 30-second skip technology is now widely available,

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3. Ad spending is not threatened

103. As discussed above, DVR households actually watch more commercials than non-DVR households. Thus, it is not surprising that the price of network advertising has not fallen in recent years, a period during which the technology of television program storage and adskipping has continually improved. This is a reason to disregard the contentions of ABC and its executives when they declare that a further incremental improvement in this technology would, between now and the time of trial, suddenly impact ABC's advertising revenues.

104. Disney's Robert Iger has himself made the point about the seemingly counterintuitive relation between ratings and the price of broadcast network advertising. As discussed in a *Broadcasting & Cable* magazine article:

Cable, ironically, is a victim of its own success. As it steals audience from networks, advertisers have fewer opportunities to reach millions of broadcast viewers at once. That scarcity gives NBC, CBS, and the other established networks the leverage to jack up prices for their big-reach shows, those drawing 10 million-20 million viewers. This despite the fact that, in the days before the onslaught of cable, those same broadcast networks shows enjoyed audiences twice as big. "We believe that CPMs will increase simply by virtue of the fact that ratings are down," ABC President and COO Robert Iger explained to an analyst last year. ¹⁰⁶

I understand that Professor John Hauser has undertaken a comprehensive review of recent literature and data concerning the prevalence and utilization of DVRs and the effects that such devices have on television-watching behavior in connection with his expert declaration in this proceeding.

All DVR users are not alike, and as penetration of DVRs has increased,

John M. Higgins, "The Great Divide, Why is the CPM gap widening if cable keeps grabbing viewers from broadcast?," *Broadcasting & Cable*, March 29, 2004.

105. As discussed above,		
		the

networks have not lost out in their ability to charge for advertising. In fact, based on a cost per 30-second advertisement or on a cost per thousand homes (CPM) basis, the networks have been largely able to maintain their advertising revenues.

106. Exhibit 14 shows household viewing and ad revenue measures from 1990 to 2012 for broadcast networks. These data are reported by the Television Bureau of Advertisers (TVB). Column (1) shows the average viewing minutes for broadcast networks. Column (2) shows the cost per 30-second commercial. These costs have fluctuated over time as the broadcast industry has been affected by general economic conditions but have not followed the ratings decline. This is reflected in the data shown in Column (3), where CPM has increased over time.

107. Further, some market analysts expect the advertising situation of the networks to remain strong. According to Fitch Ratings in September 2012, "[t]he aggregation characteristics of broadcast networks relative to other mediums are likely to continue to support stable or slight price increases for at least several years." ¹⁰⁷

108. The reason for price increases in the face of falling program ratings is explained by media analyst Brian Wieser:¹⁰⁸

Fitch Ratings, Credit Encyclo-Media, Fitch's Comprehensive Analysis of the U.S. Media & Entertainment Sector, Volume V • 2012-2013, September 13, 2012, p. 83.

Exhibit 3j, Brian Wieser, 2012 Upfront Preview: Setting Expectations at 8% CPM Increases, Pivotal Research Group, February 1, 2012, p. 2.

Historically, national television advertising has uniquely satisfied the goals of some segments of marketers better than alternatives, and thus has held a dominant place on many media plans. The goals in question relate to the reach (% of the target audience exposed) and frequency (average number of times an audience was exposed). Advertisers find absolute cost advantages in prioritizing media budget allocations towards individual media owners (or "suppliers") who can contribute the broadest reach and frequency to a campaign from the packages (bundles of commercial inventory) they sell. This may initially seem counterintuitive when network TV pricing can cost \$40 per thousand impressions (CPMs) vs. cable TV programming which can cost closer to \$10 per thousand impressions. However, the duplication of audiences which occur in any package of buys from national cable programmers is much worse on cable than on network TV, and more than offsets any cost savings. Consequently, most individual marketers with national TV budgets will continue to prefer network TV advertising as their starting point for their media plans, even as ratings continue to fall with every passing year.

- a. Social media trends may also boost TV advertising
- 109. Social networking sites like Facebook and Twitter are reportedly becoming the new water cooler for social interaction, ¹⁰⁹ and primetime television is a common topic of conversation. This increases the appeal of watching programs live because social networking largely occurs during live broadcasts. Further, the use of social media may result in the plot of a program being "spoiled" for a television viewer who does not watch a program live, but intends to watch it at a later time.
- 110. Social media, where internet users use websites like Facebook and Twitter for social networking, commenting and blogging, have grown rapidly in popularity. In the U.S., social networks and blogs reach

See e.g. Shayndi Raice, "The End of Channel Surfing?" Wall Street Journal, August 6, 2012.

¹¹⁰

111

111. While non-linear distribution of video online is becoming more and more popular, the growth in social TV creates additional reasons to watch live. The integration of social media features into ad-supported streaming TV web sites may also encourage viewers to choose to watch more ad-supported programs rather than to watch time-shifted programs on a DVR that allows ad-skipping but does not provide social media functionality.

4. Benefits to broadcasters of ad-skipping

112. A small body of academic economic research has shown that there is another way in which ad-skipping technologies may benefit broadcasters, apart from the fact that DVRs allow viewers to watch commercials time-shifted that they might have never watched otherwise. The most directly applicable analysis is developed by professors Simon Anderson and Joshua Gans. They consider two modes of ad-avoidance. In the traditional mode, a viewer can avoid ads by leaving the room, or flipping channels, etc. They find that in response to this mode of ad-avoidance levels of advertising are limited by broadcasters' concerns not to push viewers so far as to skip all the ads or not watch their programs at all. They then consider an alternative mode of ad avoidance that uses an ad-skipping technology—such as a DVR—that imposes a sunk cost 113 on consumers. This leads to an economic equilibrium with a different outcome—one with *more* advertising. This theoretical result arises from what may well be an

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Simon Anderson & Joshua Gans, "Platform Siphoning: Ad-Avoidance and Media Content," *American Economic Journal: Microeconomics*, 2011, vol. 3, issue 4, pages 1-34

A sunk cost is an upfront investment that cannot be reversed or recovered at a later date when the quantity of a product produced or, in this case, consumed may be determined.

important effect in my own analysis of the effect of the Hopper. The authors model a population of consumers that have a range of distaste for advertising. When a technology becomes available that allows skipping ads for a sunk cost, it effectively segments the market. Consumers who strongly dislike ads invest in that technology. However, the remaining viewers are less averse to ads and this allows a broadcaster to increase the volume of advertising without losing viewers. The authors note that this is consistent with increasing total ad time on broadcast television in the early 2000s.

113. The academic research illustrates that broadcast markets are complex and that even a phenomenon such as ad-skipping, which might appear to harm broadcasters, may ultimately be beneficial.

5. PTAT and AutoHop technology not bound to spread

114. ABC claims that unless DISH stops providing PTAT and AutoHop features, other cable and satellite TV providers will either implement existing plans to introduce similar technology or be forced to introduce similar technology to avoid losing subscribers to their competitors over the longer term. ABC's pleading misunderstands the nature of competition for subscribers which involves many bundles of product offerings and attributes that consumers evaluate in combination. No single attribute dominates consumer choice. ABC's claim regarding the importance of the technology to subscriber competition is contradicted by the facts. For example, as explained below, DirecTV has denied it has any plan to imitate DISH's Hopper between now and trial.

ABC Memorandum in Support of a Preliminary Injunction, p. 35.

^{11:}

- a. No expectation of similar features being offered by competitors before trial
- 115. ABC argues it will suffer irreparable harm due to the "likelihood that DISH's competitors may offer similar technology if DISH's service is not enjoined."¹¹⁶
- - c. Competition would not necessarily spread the technology
- 118. According to ABC's Justin Connolly, Senior Vice President at ESPN Sales and Marketing, competition between cable and satellite providers for subscribers will lead others to

ABC Memorandum in Support of a Preliminary Injunction, p. 35.

¹¹⁷ Connolly Declaration, ¶ 27.

¹¹⁸

ABC Memorandum in Support of a Preliminary Injunction, p. 37.

Deposition of Vivek Khemka, October 23, 2012, p. 97.

"offer their own versions of PrimeTime Anytime/AutoHop if DISH is not enjoined from continuing to offer this service." But this assertion lacks factual support. The Federal Communication Commission's (FCC) 2012 Status of Competition report and other sources cited below provide evidence that competition for cable and satellite TV subscribers does not drive all companies to develop identical offerings. According to the FCC, the opposite is the case: "product differentiation has been, and remains, a key factor for competing in the market for delivered video programming." 122

119. The market evidence shows that companies compete with differentiated service offerings and neither PTAT nor ad-skipping technology is essential to competitors' market success.

120. Cable and satellite TV providers compete by offering multiple services and features and by emphasizing their differences in their marketing efforts such as a unique video product that a rival cannot or does not provide. ¹²³ Examples of the resulting product differentiation are

¹²¹ Connolly Declaration, ¶¶ 27-29.

FCC, "Fourteenth Report," In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, MB Docket No. 07-269, July 20, 2012, ¶ 94 ("FCC, 14th Status of Competition Report").

As the FCC notes: "For instance, an MVPD might offer a unique video product that a rival MVPD cannot or does not provide. DIRECTV offers the NFL Sunday Ticket where subscribers can watch every out-of-market professional football game in HD. In its advertising, DIRECTV states that, 'You won't find anything like it with DISH Network or cable ... It's available only on DIRECTV.' Some MVPDs highlight better-value or low-price video packages. DISH Network maintains that it offers better value, and claims that, 'DIRECTV can't compare with DISH Network's everyday low price.' . . . Commonly, an MVPD claims to offer more channels or more channels of a specific type than its rivals. For example, DIRECTV claims to offer the most fulltime HD channels. Verizon, on the other hand, claims that FiOS TV offers more children's, sports, and premium movie channels than cable. MVPDs further attempt to differentiate their products by claiming their products have superior quality. For example, Verizon FiOS claims that it offers brilliant HD picture quality in almost any kind of weather: 'Simply put, it's the best HDTV experience you can get.' *Id.* ¶ 94 (footnotes omitted).

the variation in provision of DVR, and TV bundled with telephone service and internet access. 124 A further example is the difference in the emphasis put on VOD.

121. Bundled services tend to be promoted by cable companies, in part to offer better prices, but also to differentiate themselves from satellite companies that face technological limitations on providing internet and telephony services. However, there is significant variation in the service offering even among cable companies. For example, at four of the major cable companies, the double play bundle predominates, while at three other MSOs the triple play bundle is the preferred service offering. 126

122. Cable and satellite TV providers can also offer similar video services in different ways. DirecTV's Genie DVR and Cablevision's remote storage DVR (RS-DVR) are illustrations of this. DirecTV recently introduced an upgraded DVR, called the Genie, that industry observers considered its response to the Hopper. The Genie has numerous capabilities akin to those of the Hopper but differs on other significant features. The Genie provides the ability to record five programs at the same time, and to have Genie recommend

Subscribers with double or triple play, *i.e.*, combinations of video, broadband, and telephony.

[&]quot;The two DBS MVPDs focus their marketing on video services, in part, because the satellite technology they use for delivering video programming limits their ability to provide non-video (*i.e.*, Internet and telephone) services. The major cable and telephone MVPDs focus their marketing on bundled video, Internet access, and telephone. Their emphasis usually is that bundles offer better prices for consumers, relative to individual service offerings." FCC, 14th Status of Competition Report, ¶ 94.

T. Lenoir, "Bundled subs grow 6.6% YOY in Q2, now account for 64% of customers," SNL Financial, September 11, 2012.

See, for example, A. Wallenstein, "DirecTV uncorks Genie to compete with Dish DVR, New multi-room device set to counter Hopper," *Variety*, October 11, 2012; and A.B. Block, "New DirecTV DVR Records Five Shows at the Same Time," *Hollywood Reporter*, October 11, 2012.

and store new programs that match the viewers' TV preferences.¹²⁸ Notably, Genie does not offer a PTAT/AutoHop feature.

123. Cablevision offers DVR capability without the customer's needing a DVR at home by centrally storing the content on Cablevision's remote servers.¹²⁹ Customers can record up to four programs at the same time, including "an entire season of [their] favorite show." Customers can store up to 100 hours of Standard Definition programming.¹³⁰ Cablevision first announced its plans to test the service in March 2006.¹³¹ Following litigation initiated by a number of media companies,¹³² Cablevision began rolling out its RS-DVR service in November 2010.¹³³ Despite some apparent advantages of Cablevision's system, it appears that currently only Comcast has begun testing a similar service in a limited way.¹³⁴ These different bundles offered by cable and satellite providers illustrate the attempts of providers to distinguish themselves from their competitors. We do not see uniformity in product offerings,

DirecTV default is to 30-second slip, a feature similar to 30-second skip, but that allows for partial viewing of commercials, but it is easily convertible to a 30-second skip. DirecTV, The 30-Second Slip, http://support.directv.com/app/answers/detail/a id/1770/~/the-30-second-slip, accessed December 1, 2012, and TV Blanket, Skipping Commercials with DirecTV and Dish DVRs, http://www.tvblanket.com/skipping-commercials-with-directv-and-dish-dvrs/, accessed December 6, 2012.

Cablevision is one of the largest cable operators (MSO) in the U.S., with 2,947,000 video subscribers at the end of 2011. This does not include 303,000 video subscribers outside the New York metropolitan region. SEC, Form 10-K, Cablevision Systems Corp., December 31, 2011, pp. 1, 57.

Cablevision, About DVR Plus (http://optimum.custhelp.com/app/answers/detail/a id/2580/~/about-dvr-plus, accessed December 1, 2012).

D. Lieberman, "Cablevision tests 'remote storage' DVR use," USA Today, March 27, 2006.

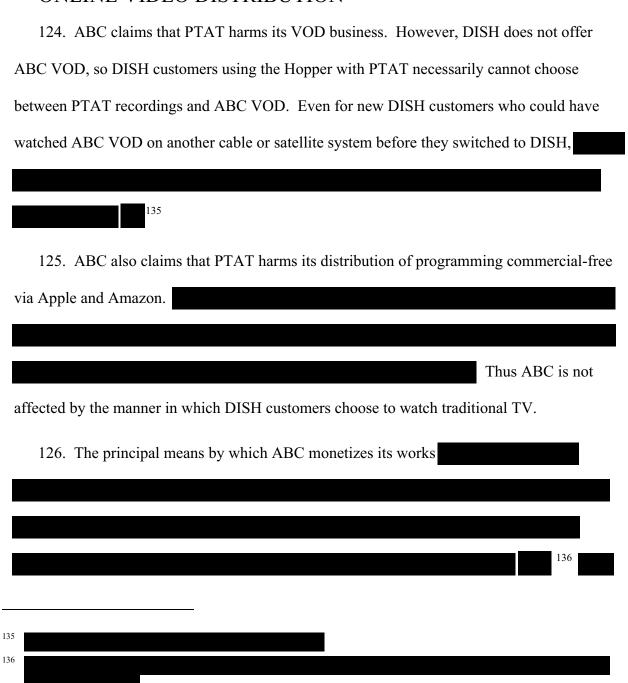
Plaintiffs, including Disney/ABC, CBS, NBC Studios and 20th Century Fox, claimed that RS-DVR was "an unauthorized video-on-demand service that would undermine the video-on-demand, download, mobile device, and other novel and traditional services that plaintiffs and other copyright owners have developed and are actively licensing into the marketplace." The Supreme Court declined to hear appeal of the appeals court decision allowing the service on June 29, 2009. *Twentieth Century Fox Film Corp., et al. v. Cablevision Systems Corp. et al.*, Complaint for Declaratory and Injunctive Relief, U.S. District Court, Southern District of New York, May 24, 2006, ¶ 1; and S. Clifford, "Supreme Court Allows Wider DVR Use, *The New York Times*, June 30, 2009.

J. Barthold, "Cablevision RS-DVR launch finally will spell end for conventional DVRs," FierceCable, November 5, 2010.

¹³⁴ J. Baumgartner, "Comcast Tests Network DVR in Boston," LR Cable News Analysis, April 13, 2012.

but rather variety and variety that is continually changing over time. In such a market, there is no reason to expect that one particular innovation will be adopted by competitors.

VI. NO EVIDENCE OF ALLEGED HARM TO ABC'S VOD AND ONLINE VIDEO DISTRIBUTION



In any case, DVDs are made available "typically after the end of the broadcast
season." ¹³⁸ Since PTAT only makes eight days of primetime programming available, DVD
and Blu-ray discs do not provide an alternative to playback for any PTAT recorded programs

127. Even if PTAT and AutoHop had some impact on separate VOD revenues and commercial-free license fees,

128. The assertion that PTAT discourages digital distribution of primetime programming through non-traditional windows is inconsistent with ABC's own view that digital distribution windows are largely synergistic with traditional TV a complement rather than an alternative.

A. Absence of Alleged Harm to VOD

129. ABC has VOD agreements with cable providers and with DirecTV "enabling their subscribers to access programs . . . via on-demand menus on their TV screens." DISH offers its customers limited VOD, which does not include ABC primetime programs. ABC claims

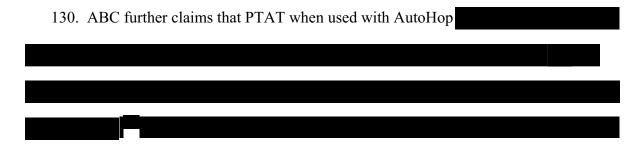
¹³¹

ABC Memorandum in Support of a Preliminary Injunction, p. 5.

Exhibit 4.

ABC Memorandum in Support of a Preliminary Injunction, p. 5.

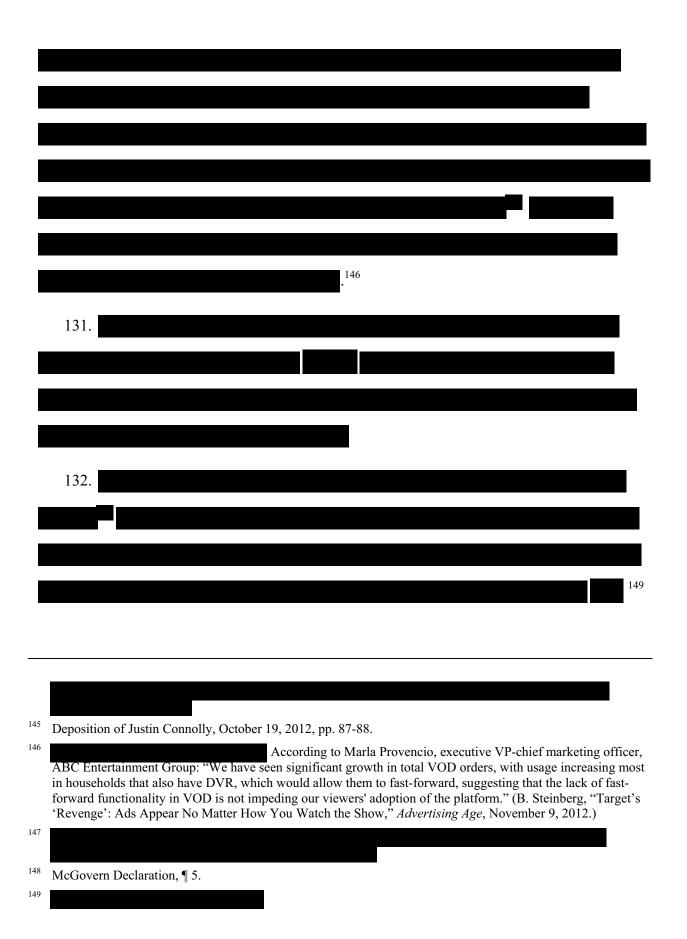
that PTAT makes "unauthorized copies of ABC's prime time programming available ondemand and without commercials", ¹⁴¹ and thereby "threatens to diminish the value of the VOD rights ABC licenses to third parties."¹⁴² However, because VOD services are only available to customers of a particular cable or satellite TV provider, choosing to watch programs via VOD rather than live, time-shifted on a DVR, or via an online video delivery service, does not affect VOD usage by the customers of other cable or satellite TV providers. The value of the VOD service provided to a Comcast customer by Comcast, for example, is not diminished by what DISH offers. In this regard, it is important to recall that Hopper PTAT capabilities are incremental to what a DISH customer could already do, namely record and time-shift whichever primetime programs he or she wished to have on hand, fast-forwarding through the commercials if he or she so wished. No DISH customer is able to say "I will watch an ABC primetime program on ABC VOD." Therefore, no DISH customer who acquires the Hopper with PTAT is able to say "I will watch an ABC primetime program on PTAT instead of on ABC VOD." Therefore, for existing DISH customers, the Hopper with PTAT can have no impact at all on ABC Network's VOD revenues.



ABC Memorandum in Support of a Preliminary Injunction, p. 34.

¹⁴² Connolly Declaration, ¶ 15.

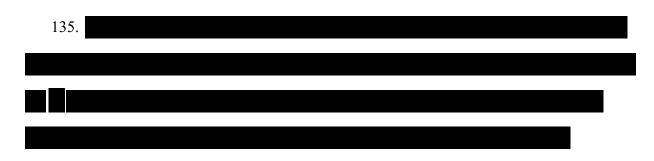
ABC Memorandum in Support of a Preliminary Injunction, p. 24.



B. AutoHop Presents No Danger to Commercial-Free and Other Online Video Delivery Services

133. ABC claims that AutoHop harms
and harms its ability to maximize "total revenue"
from "releasing its primetime programming in different 'windows,' on different platforms and
in different formats." ¹⁵¹ However, ABC provides no empirical evidence

134. Online video delivery (OVD) services are video services available to households with high-speed internet connections (broadband internet). They differ from VOD provided by a cable company or satellite service in that one does not have to be a subscriber to a particular company's service. OVD content can be accessed by any household with broadband internet. According to the Federal Communications Commission, "[p]roviders have continued to develop business models for the provision of OVD services. Current business models, which providers often use in combination, include free (often ad supported), subscription, pay-per-program (rental), and electronic sell-through." 153



ABC Memorandum in Support of a Preliminary Injunction, p.25.

ABC Memorandum in Support of a Preliminary Injunction, p.34.

OVD services are also called over-the-top (OTT) services.

Federal Communications Commission, In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Fourteenth Report, MB Docket No. 07-269, July 20, 2012, ¶ 10.

136. ABC itself has put limitations on the ability of households to stream and view its TV programs, making them available no sooner than the day after they first air on broadcast TV.¹⁵⁵ Recent episodes are available only on ABC's own website, abc.com, on Hulu.com, and to Hulu Plus subscribers.¹⁵⁶ On abc.com and Hulu.com, which are advertising supported, the programs are generally available for four or five weeks from their original air date¹⁵⁷ and are streamed to an internet-connected device.¹⁵⁸ Other OVD services, such as Netflix, that do not have access to recent shows, do not offer an alternative to PTAT, which makes shows available for eight days after the air date. Hulu Plus offers current and back episodes and differs in that it is available only by a subscription of \$7.99 per month.¹⁵⁹ ABC's web site abc.com is not particularly popular. In October 2012, visitors to abc.com only represented 4.2 percent of

¹⁵⁴

abc.com (http://abc.go.com/watch/help, visited September 27, 2012).

Connolly Declaration, ¶ 16. Shows are also available via cable company sites such as Comcast's Xfinity, but those are not accessible to DISH customers.

abc.com (http://abc.go.com/watch/help, visited September 27, 2012) and Hulu.com, Hulu Plus: Frequently Asked Questions (http://www.hulu.com/plus?src=sem-plus-google&cmp=205&gclid=CIfv04-5prECFSMCQ&utm-expid=6626762-3, visited July 19, 2012).

The abc.com system requirements include Microsoft Windows XP or a later version or Mac OS X 10.4 or a later version. Further, "[f]or optimal playback experience, your computer should have at least 512 MB of RAM, a video card with at least 128 MB of RAM, and a high speed Internet connection (DSL or cable modem)." (abc.com (http://abc.go.com/watch/help, visited September 27, 2012).) Hulu.com has similar requirements (http://www.hulu.com/support/article/166380, visited September 28, 2012).

Hulu.com, Hulu Plus: Frequently Asked Questions (http://www.hulu.com/plus?src=sem-plus-google&cmp=205&gclid=CIfv04-5prECFSMCQ, visited July 19, 2012).

unique visitors to internet video sites, and these visitors on average spent 1.6 hours viewing ABC video, just over three minutes per day on average.¹⁶⁰

137. Streaming OVD services are further differentiated from recent broadcast TV programming by what they offer. Hulu Plus offers a large library of movies and TV episodes extending back to the 1910s. (Exhibit 22.) The other major market participants are Netflix and Amazon Prime. Both are subscription services and each offers a large library of television programs and theatrical movies of which only a small part is current. Netflix has about 3,500 seasons ¹⁶¹ of TV programs stretching back to the 1930s, as well as over 10,000 movies in its library. (Exhibit 23.) Amazon Prime has over 1,300 seasons of TV programs going back to the 1950s and almost 20,000 movies. (Exhibit 24.) Blockbuster, which is part of DISH, also streams product, largely offering movies. (Exhibit 24.)

138. Download OVD services, which provide for the rental or purchase ¹⁶⁵ of programming, include Amazon Instant Video, CinemaNow, iTunes and Vudu, among others. Rental prices range from about \$1.00 to \$6.00 for movies, and purchase prices range from about \$4.99 to \$20.00 for movies and from about \$1.00 to \$4.00 for TV programs. ¹⁶⁶ These services are aimed at mobile devices and are used mostly by viewers in locations without standard TV

SNL Kagan, Economics of Internet Media, "Broadcasters see big gains in online video," December 3, 2012, and comScore, "comScore Releases October 2012 U.S. Online Video Rankings," November 15, 2012.

A season is defined as a season of airings for a single series. For example, Grey's Anatomy, which is an ABC Network show, is counted seven times for the seven seasons that are in the Netflix library. The most recent season available is 2010.

Data are as of July 2012. (SNL Kagan, Netflix Streaming Catalog, August 13, 2012.)

Data are as of August 23, 2012 (www.amazon.com/prime).

¹⁶⁴ Block buster (http://www.blockbuster.com/download, accessed August 28, 2012).

This service is called electronic sell through (EST).

SNL Kagan, The State of Online Video Delivery, 2012 Edition, June 2012, pp. 8-9.

viewing capability. For customers of cable or satellite providers with broadband internet, OVD services are available but the associated subscription, rental or purchase costs make these unattractive alternatives to using VOD or DVR playback to view the same programs at no extra charge.

139. Online video services that may be available for DISH customers, including those provided by ABC or Hulu, are also not close substitutes for playback viewing with DVRs, including the Hopper with PTAT for reasons other than price.

Hulu Plus,

iTunes, Amazon, and Netflix stream libraries, which consist mainly of movies and prior-season TV. The online streaming services have a wide variety of program materials, of which TV programming is only a part.

- 140. ABC views its online offerings as separate and incremental to its cable and satellite distribution and without an associated effect on ratings. In 2006, ABC began testing online distribution and, according to ABC Television Group president Anne Sweeney, "the experience with 'ABC.com suggests that online viewing is additive to TV viewing, not alternative." This means that few OVD users would likely consider PTAT playback to be a close substitute for their online viewing.
 - 141. In Disney's 4th Quarter 2011 earnings call, an analyst asked Disney CEO Robert Iger:
 - Q. And then, Bob, you're experimenting about as much as anybody with digital distribution business models between Hulu and Netflix and YouTube and building a disney.com content portal. I just is there anything that you've learned over the last year that you can share with us that's influencing your strategy about digital distribution, whether it's in terms of updated

Michael Buckley, "Broadcasters See Bright Future At Merrill Lynch Confab," *SNL Financial*, September 28, 2006; see also Derek Blaine, "Disney selling out online inventory quickly," *SNL Financial*, September 14, 2006.

thoughts on cannibalization with traditional usage, health of pay-TV ecosystem longer-term, what the best online business model might look like?

Mr. Iger responded by noting "how well ... traditional media platforms have held up" and analogizing to earlier fears about DVRs:

A. We thought the technology was going to create opportunities for consumers to consume our content in new ways and in doing so enable us to monetize in new ways. That's certainly coming true with deals like the one we mentioned for Netflix and Amazon.

At a 2011 investment bank conference, Disney's Chief Financial Officer was asked about Disney's strategy in using new distribution technologies, as exemplified by its investment in Hulu and its deals with Apple and Netflix. He responded Disney's strategy was a "way that creates incremental revenue [a]nd doesn't cannibalize the revenue from our existing ecosystem."

142. Industry commentators also speak of the streaming OVD services as complements or supplements to TV viewing, not as competitors. For example, in an investor conference call, a spokesperson for Comcast said:

Right now, NBC Universal is distributing a lot of their broadcast content on Hulu, and they have been quite careful not to put too much of their paid-for-cable content out for free over the Internet. We think both those strategies are smart and appropriate ... and we would see after the [Comcast-NBC Universal] deal closing, lots of broadcast content going to Hulu and being available for free, and cable content that cable customers pay for, that cable companies and satellite companies and telcos pay for, being on TV Everywhere. So really I think in a way Hulu and TV Everywhere are complementary products, and I think right now, the way NBC Universal are

Exhibit 5.

Exhibit 3c.

managing those two ways of distributing are very similar to the way we would want to do it when the two companies come together. ¹⁷⁰

143. The FCC agrees with this assessment. In its most recent report on the Status of Competition in the Market for the Delivery of Video, it stated:

In the Comcast-NBCU Order, the Commission found that, while the amount of online viewing is growing, cord-cutting of traditional video programming service is relatively infrequent, and most consumers consider OVD service to be a complement to, rather than a substitute for, their MVPD service.¹⁷¹

144. Given the minimal and supplemental nature of the use of OVD services, I conclude that there will be no appreciable impact of PTAT upon them for the following reasons:



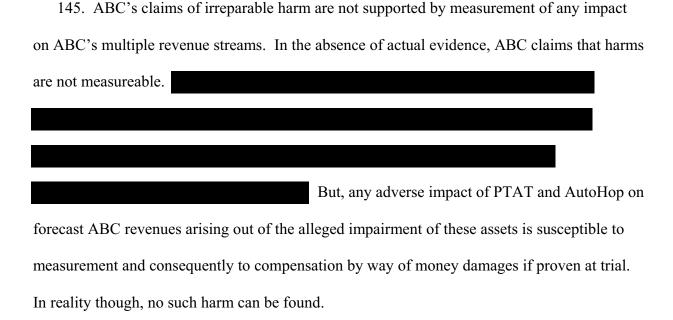
- b. Online offerings are largely separate and incremental to cable and satellite distribution so PTAT playback is not a close substitute for OVD services.
- c. ABC puts limits on access to current season content; streaming access is only available through abc.com, Hulu.com or Hulu Plus subscribers. Furthermore, on the ad-supported streaming sites, the entire primetime program lineup is not available.
- d. Netflix and other similar streaming sources have little or no overlap with the PTAT's eight days of current primetime programming so they are not close substitutes.

Comcast Investor Call Transcript, at 21, December 3, 2009, in Federal Communications Commission, In the Matter of Applications for Consent to the Transfer of Control of Licenses General Electric Company, Transferor, To Comcast Corporation, Transferee, Applications And Public Interest Statement, January 28, 2010, p. 97.

Federal Communications Commission, In the Matter of Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Fourteenth Report, MB Docket No. 07-269, July 20, 2012, ¶ 240.

e. Relatively few watch abc.com, and those who pay Hulu Plus's \$7.99 subscription fee are not doing so to watch what they can watch on DVR'd television or on abc.com for free.

VII. LOSSES ARISING UNTIL THE TIME OF TRIAL, IF ANY, COULD BE MITIGATED AND COMPENSATED



A. Absence of a Harm to Intangibles

146. In addition to its claim of harm to advertising revenue (ABC Brief §II.C.), ABC claims harm to business relationships, control over channels of distribution, ability to promote its programming, or goodwill (*i.e.* reputation). For convenience, I refer collectively to these as "intangibles."

businesses routinely measure changes in the value of intangible assets, such as brand value or goodwill.

ABC Memorandum in Support of a Preliminary Injunction, p 35.

147. In this case, ABC has failed to identify the underlying economic activity that was affected by the alleged harm to intangibles. Without identifying the underlying economic activity affected, it is not possible to determine whether or not it may be reliably measured.

B. Contractual Relationships Limit Potential Harms

148. The many contractual relationships between DISH and ABC provide opportunities for ABC to put a value on the services at issue in this litigation.

149. DISH as a program distributor has a number of contractual relationships with The Walt Disney Company and various related entities as providers of programming. Disney's Media Network segment has contracts covering its cable networks, its broadcast networks, and its owned local TV stations. Disney's Studio Entertainment segment has contracts covering its pay-per-view (PPV) and VOD movie offerings, as well as its DVD and Blu-ray offerings. This array of ongoing contractual relationships provides the parties the ability and flexibility to adapt to changes in the industry and in their economic circumstances. These contractual relationships are described in more detail, based on Disney's SEC filing, as follows:

Cable network agreements: cable and satellite providers, including DISH, contract for cable network programming such as ESPN's channels (*e.g.* ESPN, ESPN2), Disney's channels (*e.g.* Disney Channel, Disney XD), ABC Family and SoapNet. These channels are fully or majority-owned by Disney. In addition, the A&E Television cable networks, including A&E, Lifetime and History are 50 percent owned by Disney.¹⁷³

Broadcast network retransmission agreements: cable and satellite providers, including DISH, also have retransmission consent agreements with the ABC owned local TV stations and independent stations affiliated with the ABC Network (affiliated stations in turn pay ABC fees for its broadcast feed). ¹⁷⁴

PPV and VOD agreements: cable and satellite providers, including DISH, have agreements covering the offering of Disney movies on their Pay-Per-View (PPV) and VOD services.

SEC, Form 10-K, The Walt Disney Company, for FY ended September 29, 2012, pp. 1-2.

SEC, Form 10-K, The Walt Disney Company, for FY ended September 29, 2012, p. 5.

DVD and Blu-ray disk purchase: DISH operates a related DVD and Blu-ray movie rental business (Blockbuster), which has an agreement with Disney. ¹⁷⁵

150. An example of flexibility that contractual relationships offer can be found in the Digital Retransmission Consent Agreement dated September 15, 2005 between ABC, Inc. and EchoStar Satellite (the corporate name of DISH at the time). The agreement, among other things,

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As ABC itself testified before the

FCC, it sought retransmission consent compensation in the form of cash or carriage:

Cable operators usually decline ABC's cash offer and instead negotiate a customized deal that compensates ABC while meeting the operators' particular needs. ... <u>Under the various options that ABC offers to cable</u>

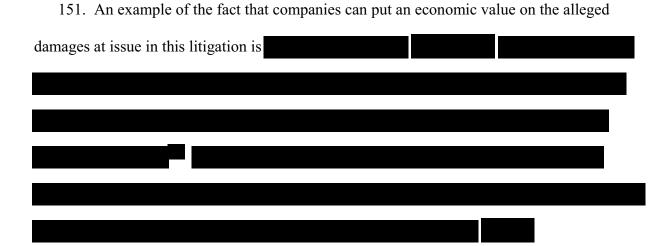
SEC, Form 10-K, The Walt Disney Company, for FY ended September 29, 2012, p. 14.

Digital Retransmission Consent Agreement between ABC, Inc. and EchoStar Satellite, September 15, 2005, (Exhibit 1 to the Declaration of David Shull, dated December 21, 2012).

The claim that ABC receives no "license fee" is mistaken. (Memorandum in Support of a Preliminary Injunction, p. 6; citing Connolly Declaration, ¶ 24.)

The carriage agreements for these networks include, among other items, terms dealing with the DISH package the network is to be carried on and the license fees DISH will pay. ESPN Classic, which rebroadcasts previously aired professional and college sports, was to be carried on DISH Network's second most widely distributed package, at that time America's Top 120. ESPN, Inc. Distribution Agreement between EchoStar Satellite and ESPN, Inc. and ESPN Classic, Inc. September 15, 2005, 5(b)(ii). In 2009, ESPN requested that DISH move ESPNU, which focuses on college sports, to a more widely distributed tier in return for moving ESPN Classic to a sports tier. J. Ourand, "ESPN to Offer Classic-for-ESPNU Swap," *Street & Smith's Sport Business Journal*, March 30, 2009. The trend in ESPN Classic license fee payments by DISH Network reflects this, dropping from \$29.6 million in 2009 to \$12.5 million in 2010 and \$3.5 million in 2011, when the full effect had taken place. (Shull Declaration, ¶ 9 and Exhibit 3.)

operators, ABC simply attempts to obtain consideration comparable to the cash option. 179



152. Renewals of retransmission agreements have also provided an opportunity for placing an economic value on AutoHop. Although the effect of AutoHop on ad-viewing is immaterial to the ratings, several local television station affiliates have used the technological advance in ad-skipping provided by AutoHop as justification for demanding increases in retransmission fees. According to David Shull, several local TV stations put a dollar value per customer on AutoHop of

153. In a contentious round of negotiations between DISH and Gannett Co., which owns22 local ABC, CBS and NBC affiliate television stations, Gannett claimed that it should be

Comments of the Walt Disney Company, attaching M. Bauman and K. Mikkelsen, "The Fair Market Value of Local Cable Retransmission Rights For Selected ABC Owned Stations," Federal Communications Commission, In the Matter of Comment Requested on A La Carte and Themed Tier Programming and Pricing Options for Programming Distribution On Cable Television and Direct Broadcast Satellite Systems, MB Docket No. 04-207, July 15, 2004, pp. 5-6. See Exhibit 25.

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Shull Declaration, December 21, 2012, ¶ 22.

compensated "for the impact of advertising revenue lost as a result of the AutoHop feature" and threatened DISH with loss of the Gannett affiliate stations, which would affect DISH customers in 19 cities. ¹⁸⁴ After extended negotiations, Gannett and DISH reached a new deal on October 8, 2012. Shortly thereafter, Gannett announced that its third-quarter net income in the time period after the AutoHop feature had been introduced by DISH had exceeded expectations, rising 33 percent, and that it was "Gannett's television business that lifted the quarter." Although this does not prove that Gannett had actually suffered no harm prior to the agreement, any harm that it claims it had suffered was evidently too small to prevent the company beating analysts' earnings estimates.

154. Another example of network executives putting a dollar value on AutoHop was provided by CBS' CEO Les Moonves in the most recent earnings call with analysts. During the call, he stated that he would consider \$5.00 per subscriber for an agreement to allow the use of AutoHop, which translates into about \$0.42 per subscriber per month.¹⁸⁶

155. To the extent that any tangible or intangible harm may be caused to ABC, adjustments to the terms of any one of an array of ongoing contractual relationships between the parties could be made to provide compensation.

C. Losses, if Any, are Compensable

156. If it were necessary, it would be no more difficult to estimate damages to compensate ABC's losses than to estimate monetary damages in any other commercial setting. The

Shalini Ramachandran and Ben Fox, "Dish's Ad-Skip Feature Complicates Talks," The Wall Street Journal," October 7, 2012.

¹⁸⁵ Keach Hagey, "Gannett Profit Gets Boost From TV," The Wall Street Journal, October 15, 2012.

FACTSET: callstreet, CBS Corp., Q3 2012 Earning Call, Corrected Transcript, November 7, 2012, p. 20. See Exhibit 26.

television industry has a wealth of data on audience, ad minutes sold, ad prices, and the financial data (including revenues, costs and profitability) of ABC. Revenues, the associated costs, and profits are all that ever could be lost as a result of copyright infringement in this instance. Vague assertions about lost goodwill or reputation rarely translate into realistic losses, but when they do, they are nothing more than lost future profits subject to forecasting and discounting to present value. There is nothing about this industry that makes it hard to calculate commercial damages.

VIII. THE PUBLIC INTEREST IN DVR TECHNOLOGY IMPROVEMENTS

television. 187 Like most other activities, TV-watching calls for making decisions: when to watch and which programs and channels and for the increasing number of families with DVRs watch live or record for later and watch the commercials or skip them. The technology for these latter functions has improved steadily over the years, as described above, with increased DVR storage capacity and improvements in ad-skipping functionality. These developments have improved the experience of TV-watching and saved time for consumers. They have been resisted by the networks at every turn despite the fact that continual improvements in the quality of the TV experience has left them better off in terms of both audience and advertising. If the networks had had their way from the outset, the now-unimaginable result would have been no VCR cartridges, no time-shifting and no hope of avoiding a commercial short of walking out of the room.

As of 2009, the last year reported in TVB, TV Basics, June 2012, p. 6.

158. There is no public obligation to watch ads instead of channel-surfing, going to the refrigerator or ad-skipping with a remote control just as there is no obligation to call the Mets stadium Citi Field or the Orange Bowl the Discover Orange Bowl. With no such public obligation to bind viewers to their sets during commercials, interference with the diffusion of improvements in ad-skipping technology is a strategy intended to make it harder for viewers to have their way with their own time and attention.

159. Parents have a particular interest in controlling the viewing of their children and particularly the commercial messages that they may be exposed to by watching television. Making it harder for them to do so would detrimental to this interest.

160. Much of modern household technology is devoted to saving time. The relatively high level of American wage rates and the relatively long American work-week means that leisure time is precious in this country so it is no surprise that people invest in technology to save that time. Ad-skipping technology is part of that technological fact of life. Attempts by networks to deprive American families of control over hours per week of their lives that would be spent watching unwanted commercials is a direct assault on the public's interest in avoiding wasteful expenditure of precious leisure time. The public has an interest in innovations that result in a more enjoyable TV viewing experience. As has been stated elsewhere, the "Greatest impact [of advances in DVR technology] is not more TV viewing, but getting more out of TV viewing time and enjoying TV more" (see Figure 8).¹⁸⁸

Rachel Mueller-Lust, "Digital Video Recorders: Adoption & Impact," ABC Re:search, ABC 2252-2278, (ABC 2262).

Figure 8
ABC Presentation: Digital Video Recorders: Adoption & Impact

Consumption

- Over half of households do not believe they watch more TV
 - The DVR has not increased the time that remains in the day
 - Improved "viewing efficiency" more programs in less time
- About a third of households feel they watch more hours of TV
 - Watching many new shows consistently
 - TV became more interesting so they set aside more time to watch
- Greatest impact is not more TV viewing, but getting more out of TV viewing time and enjoying TV more



Proprietary

ABC re:search

IX. CONCLUSION

161. The Hopper with PTAT and AutoHop will have minimal effect on ABC between the present and the time of a trial court judgment.

The additional fact that the penetration of

DVRs with program storage and manual ad-skipping capacity is already high means that the incremental effect of the new technology will be small. That the new technology enables additional ad-watching, as well as ad-skipping creating benefit, not harm for broadcast networks further reduces the potential for any significant impact in the coming months.

- 162. ABC's claim that an injunction is necessary because the various intangible effects on its business are not measureable is contradicted by the facts. The potentially affected sources of revenue are all measureable in the data-rich environment of television. There has been and in the near term there is not expected to be any material effect on the multiple sources of revenue that support primetime programming.
- 163. In the longer term, other forces come into play, including the ability of ABC to continue to adapt its flexible business model. That most TV-watching will continue to be live and therefore unaffected by DVR technology is the broad base that supports a continued stream of ad revenues. At the margin, ABC and the industry as a whole are gravitating away from the force-feeding of ads to broadcast audiences. The multiple revenue streams that they are now developing are for the most part complementary of traditional TV-viewing and are not threatened by an improvement in DVR technology.
- 164. ABC and its executives in their filings have contended that harm will be irreparable. It is telling that these contentions are pure prose and conjecture. There is not a single number, calculation, dataset or forecast that ABC has offered in support of its arguments.
- 165. The continued enhancement of DVR features is slowing the demise of traditional TV, not speeding it up. The public interest is served by innovation in time saving technology that makes TV viewing more enjoyable.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Executed this 21st day of December, 2012.

Richard T. Rapp